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PUBLIC HEALTH SERVICE
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ADVISORY BOARD ON

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C O N T E N T S

Dec. 11, 2006

TRANSCRIPT LEGEND

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-- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.

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-- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.

-- "*" denotes a spelling based on phonetics, without reference available.

-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

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P R O C E E D I N G S

(1:22 p.m.)

WELCOME AND OPENING COMMENTS
DR. PAUL ZIEMER, CHAIR

DR. ZIEMER: Good afternoon, everyone. I'd like to call the meeting to order. This is the 42nd meeting of the Advisory Board on Radiation and Worker Health, meeting in Naperville, Illinois. And I feel like I can welcome you to Naperville. This is actually my old stomping grounds since I went to college about ten miles from here down the road in Wheaton College. Of course in those days Naperville Road between here and Wheaton was a gravel road, so the area's changed a bit since those days, but nonetheless it feels like home to be back in -- in the Naperville area.

My usual reminders to everyone, please register your attendance in the booklet out in the foyer. Those members of the public who wish to address the Board during the public comment sessions, please sign up in the book out there for that purpose. On the tables in the rear of the room are various documents that will be

part of our deliberations over the next three days. Be sure you have whatever copies you need, as well as copies of the agenda.

The agenda is not necessarily a time-fixed agenda or a time certain agenda. We always have to estimate how long various issues will take. But we are flexible enough to be able to adjust the agenda as the need arises. There is one somewhat fixed-time item, and that is for tomorrow. To the best of our understanding, Senator Obama will be here at 11:15 tomorrow morning. So to the extent that he's able to keep on that schedule, wherever we are in the agenda, we will interrupt at that point and have the opportunity to hear him as he wishes to address the Advisory Board.

Now let me call on Dr. Lewis Wade, our Designated Federal Official, for additional comments.

DR. WADE: Thank you, Paul. Let me start as I always do -- I hope I do -- and always end, and that is to thank the Board for its service. You are a most productive and hard-working Board, and we thank you for that. I bring you regards and thanks from Secretary Leavitt,

Secretary of HHS; and then from Dr. Gerberding, the director of CDC; and then John Howard, the NIOSH director. John will be with us for part of this meeting, and if you see him and you want to share some thoughts with him, please feel free to do that.

A couple of things -- we have also another distinguished guest, Elaine Baker with Committee Management from CDC is with us, and Elaine's going to chat with you tomorrow. You said that you wanted to have an opportunity to chat with people from Committee Management, so we sent our best and brightest and Elaine is here and will engage with you tomorrow.

A couple of sort of quirks of the agenda. At 1:45 on Wednesday we have a time that we're calling SEC write-up review. This was put in on the recommendation of Dr. Melius and others. The Board works very hard at doing its SEC drafting in real time during the meetings, and we thought it would be well to reflect, just before the Board adjourned, to look at whether or not there should be any changes or modifications to the Board's recommendations. That will give NIOSH and Department of Labor

and the attorneys an opportunity to look at the motions and the language, and if there's any wisdom they want to bring to the Board, they can bring it to the Board while the Board is still in session so the Board can make those changes.

And then also at 3:15 on Wednesday we have an ample amount of Board working time. This will be to look at scheduling additional meetings, you know, the variety of issues that the Board needs to work on, and also any items that we're not able to finish on time in the agenda we'll be able to take up on Wednesday afternoon.

So again, thank you for your service. I look forward to a busy and a most productive Board meeting.

DR. ZIEMER: Thank you very much, Lew. And let me add, as far as the item on Wednesday afternoon's agenda, the SEC write-up review, that becomes important because our experience, we've had several motions by this Board which we found after the fact, when the Chair got to the point of writing them on a formal letterhead and transmitting them to the Secretary, that there were some glitches either

in how we defined the -- the petitioners versus how they were defined by NIOSH, or there was some other perhaps questionable references to federal documents -- glitches which were correctable, but we hate to actually, after the fact, change the action of the Board in terms of approved wording. So this will give us an opportunity, if we do have approved motions today and tomorrow, to go back and say okay, is there anything that causes discomfort from either NIOSH or the petitioners or the -- our counselors, our attorneys, so that will be important. So in a sense we will -- if there are appropriate motions on these SEC petitions -- well, any motion is appropriate, but if there are motions, we will in a sense consider them provisional in the sense that you will have a final opportunity to -- to take a relook at the wording later in the meeting and take care of any glitches that might arise.

DR. WADE: And maybe just to follow up a little bit more, the Board obviously is in a phase of its operations where dealing with SEC petitions and making recommendations to the Secretary is a large part of what the Board is doing. The

precise wording of those determinations and recommendations become very important. The Board has talked about the fact that the HHS Secretary makes a definition of class based upon a recommendation it would receive from this Board, and then the Department of Labor determines eligibility. Those are questions that carry with -- with them great significance in terms of how things play out, and I know that the Board wants to reflect upon those issues. And this will give us an opportunity at the end of each meeting to reflect on those issues, particularly in light of lessons we've learned from actions that might have been completed a Board meeting or two earlier. So this becomes more and more an important exercise for the Board in terms of definition, and that's why we wanted to revisit it, and we'll make this a regular part of every Board meeting.

DR. ZIEMER: Thank you. For the record, let us just show that all Board members are present, with the exception of Dr. Poston -- who we understand ran into some weather problems and perhaps will still be arriving, but arriving

late -- and Wanda Munn -- who is here, but ran into some logistical problems and -- well, I don't need to get into what they are, but she will rejoin us sometime yet this afternoon.

DR. WADE: I would ask if Dr. Poston might be on the phone. Is Dr. Poston on the phone?

(No responses)

Okay, fine. We have a quorum of the Board.

DR. ZIEMER: We do know that he was planning to be here and apparently ran into some weather problems as far as his flights were concerned, so perhaps he will arrive yet as we continue.

At the front end of our deliberations here today we have two SEC petitions to deal with. The first of these is the Monsanto Chemical Company petition, and the second is the General Atomics SEC petition. And LaVon Rutherford from NIOSH is going to make both presentations in terms of the NIOSH evaluation report.

Let me ask, though, before LaVon begins -- Dr. Wade, are you aware of any of the petitioners that are present or planned -- or wished to be present by either phone or in person?

DR. WADE: To the best of my knowledge, for both of these actions there are no petitioners

who have asked to speak or we are expecting to speak, although certainly we would welcome petitioners or their representatives for either of these petitions to speak after LaVon would conclude his presentation.

MONSANTO CHEMICAL CO.SEC PETITION
MR. LAVON RUTHERFORD, NIOSH/OCAS

DR. ZIEMER: Okay. So with that, let's begin with Monsanto Chemical Company.

MR. RUTHERFORD: All right. Am I on? Can you hear me? Okay, thank you, Dr. Ziemer and the rest of the Board for giving me this opportunity to present on behalf of NIOSH and our evaluation of the Monsanto Chemical Company Special Exposure Cohort petition.

Petition -- we received the petition on January 9th of this year. The petition went through the qualification process and was qualified on May 1st of this year. We went through the evaluation process and completed our evaluation on November 7th, provided the evaluation to the petitioner and to the Board on that day.

The petition was submitted to NIOSH on behalf of the class, as required by the rule. The initial class definition was directors and subordinates, physicists, chemists, technicians

and workers that worked at Monsanto Chemical Company in Dayton, Ohio during the period from 1943 to 1949. We initially qualified the petition based on a lack of monitoring data. The petitioners supplied that basis in their petition. We reviewed that and we agreed with that.

At the time of the evaluation there were 61 claims that we felt met the current Monsanto Chemical Company class definition. That may have changed slightly between completion of the report and now, but roughly 61 claims.

The Monsanto Chemical Company was contacted by the Manhattan Engineering District in 1943 to support the development of the atomic bomb. They were asked to produce neutron sources that would be used in the trigger assemblies for the atomic bomb. The neutron sources, you know, that they looked at using were mainly polonium -- polonium, beryllium sources that -- as well as they did research and development work on other sources.

The -- initially they extracted the polonium from lead oxide, which is a uranium ore byproduct. The actual -- in Port Hope* they

removed the radium, the lead oxide was basically a byproduct. Then -- then they recognized that that process was very inefficient process. They did not -- they were unable to extract a large quantity of polonium and there was a lot of work done at the time with -- looking at irradiating bismuth -- bismuth-209, irradiating bismuth-210, 210 decays to the polonium, and so they -- they recognized that that process was a much more efficient process and they could get a lot more quantity.

So started out with the actual -- using lead oxide extraction process and moved to the -- to the -- extracting polonium from the irradiated bismuth.

When NIOSH did our -- when we did our evaluation there were a number of sources of information that we -- that we looked at to try to -- to determine whether dose reconstruction was feasible or not. We looked at Technical Information Bulletins from the -- you know, that our contractor, ORAU, had developed. We looked at the Mound site profile and -- and -- Monsanto Chemical Company was the predecessor

to the Mound site and a lot of the information on Monsanto Chemical Company early years is contained within our Mound site profile.
We interviewed former Monsanto employees to -- to discuss with them potential exposure scenarios, what they could tell us during -- during the class period. We looked at case files in the NIOSH databases. We reviewed the site research documents in the site research database, and we looked at documents and affidavits provided by the petitioner.
In addition, we looked at the polonium reconstruction database. This is a database of polonium bioassay data that was put together for Monsanto Chemical Company workers, as well as Mound workers. We looked at the CEDR database, we looked at Monsanto Chemical Company progress reports, and we looked at some FUSRAP information.
Monsanto Chemical Company employees were exposed both internally and externally from -- during the production of neutron sources, performing laboratory research operations that supported the development of polonium extraction processes, and the production of

polonium neutron sources. In addition they did research on operations with thorium and uranium -- excuse me, that should say thorium and radium, that's -- make that correction. And they did -- exposure as well to ore byproducts. The principal external exposures, there was a -- high beta dose rates from the decay of the bismuth-210 from the irradiated bismuth slugs. You had neutron exposure from the neutron sources. You had photon exposure during the polonium production processes, as well as X-ray exposures from diagnostic X-ray procedures. Principal internal exposures were from polonium, impurities in the lead oxide -- uranium and uranium progeny -- activation products, and then research and development work with the thorium and radium.

All right, availability of dosimetry data. External monitoring data, we have external monitoring data starting in February of 1944 to the end of the class period. However, there is one problem with that. The data -- when -- when -- during the time period when the workers' exposure data was logged, it was logged numerically and there was a code key

developed for that numerical logging of the data. Those code keys were lost. However, the data is available.

We have extremity data from finger rings from the -- February as well to the end of the project, and there is no neutron monitoring data prior to September of 1949.

Internal monitoring data, records indicate that bio-- you know, that the -- routinely they took bioassay samples for polonium from 1944 through '49. We have a large database, as mentioned earlier, with polonium bioassay data.

There's limited general area monitoring data. There's some blood sample data. They initially actually looked at the comparison, they -- they took blood -- what happened to my screen?

(Pause)

That's it. Okay, we know how to fix that now. You know, the thing is that you see it right here, so I didn't know it went out.

But internal monitoring data -- internal monitoring data. As I mentioned, we have bio-- polonium bioassay data. The blood samples, as I was discussing earlier, the blood samples -- they actually looked at -- initially when they

were looking at measuring the levels of polonium in an individual, they looked at both bioassay from urine and from blood. They actually measured activity in the blood. However, this is -- there's few samples in this method and they determined that their -- that urine bioassay was a better method during that time.

We have no internal monitoring data for radionuclides other than polonium.

Our evaluation process is a two-pronged process. First we look -- we determine whether it's feasible to -- whether dose reconstruction is feasible or not. If dose reconstruction is feasible, we don't have to go to that next step of determining health endangerment. If dose reconstruction is not feasible, then we must go to that next step and determine whether there was health endangerment.

NIOSH found that, based on the available monitoring records, process description and source term data are insufficient to complete dose reconstruction for the proposed class period.

NIOSH currently lacks access to sufficient

monitoring, source term and process information to estimate the internal doses from radionuclides other than polonium and the neutron external exposures.

NIOSH found that the available internal monitoring data, process description and source term data are sufficient to reconstruct occupational internal doses from polonium.

And we found that with the available external monitoring data is sufficient to complete dose reconstructions of the external beta/gamma components, including medical X-ray.

NIOSH determined that it is not feasible to complete dose reconstructions with sufficient accuracy for the -- for the class, and that health endanger-- and health of the employees was potentially endangered.

The evidence reviewed indicates that the workers in the class received chronic internal and external exposures from production and research operations with neutron sources.

Our proposed class definition is all atomic weapons employees -- oh, man, did I do it again?

(Pause)

Okay, they're going to take this thing away from me.

Again, all atomic weapons employees who were monitored, or should have been monitored, while working in the Monsanto Chemical Company Units I, III or IV in Dayton, Ohio for a number of work days aggregating at least 250 work days during the period of January 1, 1943 through December 31, 1949, or in a combination with work days within the parameter established for other classes of the employees in the SEC. That's the entire covered period.

In summary, internal -- we feel dose reconstruction is feasible for polonium exposures. We feel dose reconstruction is not feasible for other radionuclides.

External exposures are feasible for beta/gamma and occupational medical X-rays. However, external exposures from neutrons are not feasible.

And our recommendation, as mentioned previously, January 1, 1943 through December 31, 1949.

That's it.

DR. ZIEMER: Okay, thank you. This is now open

for discussion. LaVon, let me ask a couple of questions here at the front end. First of all, on the so-called code -- I'm looking for the terminology that you used --

MR. RUTHERFORD: The code key?

DR. ZIEMER: -- code key --

MR. RUTHERFORD: Yes.

DR. ZIEMER: -- the rosetta stone of --

MR. RUTHERFORD: Yes.

DR. ZIEMER: -- Monsanto. Is the code key -- this is presumably a list of the workers that would match up with some unknown numbers in the --

MR. RUTHERFORD: Well, what it is -- the actual monitoring data is there, but what it -- what they did, and I don't know if it was because of privacy or -- but they -- when they logged exposures, they logged them to the individual and gave that individual a numerical number, and then --

DR. ZIEMER: Right, so you have the numbers and the amounts --

MR. RUTHERFORD: Right, we have the numbers --

DR. ZIEMER: -- but the key is missing.

MR. RUTHERFORD: The key for that is missing.

DR. ZIEMER: Okay.
MR. RUTHERFORD: However -- and that is for both beta and gamma.
DR. ZIEMER: All right. Now in the summary table where you indicate dose reconstruction is feasible for polonium and for external, would that still be dependent on this key, or are you --
MR. RUTHERFORD: No --
DR. ZIEMER: -- saying you could do that --
MR. RUTHERFORD: -- I think --
DR. ZIEMER: -- in terms of classes of workers?
MR. RUTHERFORD: Right, with -- what we feel is the data is there and the data can be used for developing a coworker model for -- for doing the beta/gamma portion of it. But there is no neutron monitoring data at all. That's why neutrons are separated out as -- you know.
DR. ZIEMER: And then let me also ask this. In one of your slides you say that NIOSH currently lacks access to sufficient monitoring, et cetera.
MR. RUTHERFORD: Right.
DR. ZIEMER: The --
MR. RUTHERFORD: That doesn't --

DR. ZIEMER: -- the implication there, I'd like to find out what that means --
MR. RUTHERFORD: It's probably --
DR. ZIEMER: -- this is not classified data.
MR. RUTHERFORD: Correct. Correct.
DR. ZIEMER: So when you say you lack access --
MR. RUTHERFORD: Right.
DR. ZIEMER: -- does that --
MR. RUTHERFORD: That was poorly --
DR. ZIEMER: -- imply that somebody's keeping data from you?
MR. RUTHERFORD: Yeah, I -- I apologize. That should say that -- that currently that information is unavailable. We -- it may exist. We continue -- as we go through the project, we continue to get more and more information. However, at this time we do not have that information, so that should say --
DR. ZIEMER: There's not a --
MR. RUTHERFORD: Right.
DR. ZIEMER: -- chunk of data sitting somewhere and you just can't get at it.
MR. RUTHERFORD: No, there's not.
DR. ZIEMER: Dr. Melius.
DR. MELIUS: Yeah, a follow-up to Paul's

question on the external monitoring. If the key's lost, is there any -- do you have information on job title or building or something, or is it entirely lost?

MR. RUTHERFORD: It's entirely lost.

DR. MELIUS: The -- then --

MR. RUTHERFORD: What you would have -- what we would be doing with the beta/gamma external exposures developing a coworker model would be to look -- I mean setting up a distribution that we could use to -- that we could give to everyone for an external.

DR. MELIUS: So what model -- it's all basically --

MR. RUTHERFORD: Yes. Yes.

DR. MELIUS: -- information on how the sampling was done, how the people were selected or -- I mean my question I guess.

DR. ZIEMER: Well, you're not proposing to do that, though.

MR. RUTHERFORD: No, no, what I'm saying is that that's what we could do -- possibly do with that information.

DR. MELIUS: Okay.

DR. ZIEMER: Also, I might observe that during

this time frame there were no legal requirements for lifetime doses on people. They were typically weekly limits, so you could -- you could have a different code key every week, as long as your -- as long as you showed the person was under their limit for that week, that's all you cared about and there was no -- there was no reason to think that someone would have the same numbered badge every week.

MR. RUTHERFORD: Exactly.

DR. MELIUS: Yeah.

DR. ZIEMER: And I base that on our experience at -- at my institution in the late '50s. It didn't matter who had a particular number because it could be different every time. You were only interested in that period.

MR. GRIFFON: And that -- that raises a follow-up question for me, which is -- you know, do you have any way of determining the representativeness of -- of the data you do have if -- you know, I was thinking you could at least determine how many individuals were monitored by sorting by the code key. But what -- but if what Paul's saying is true, you can't do that even. Have you examined -- you know,

is there enough data there that you can say we're confident that we can reconstruct external doses for all the workers at the site. That's -- that's -- that's the benchmark that you have to test against.

MR. RUTHERFORD: I understand.

MR. GRIFFON: Yeah.

MR. RUTHERFORD: I think what we're saying is is that we feel that we can set up a favorable exposure scenario based on the information for -- that will cover all the employees, assuming -- I mean that obviously takes into consideration that -- that the higher exposed individuals were monitored.

MR. GRIFFON: Or it assumes that, yeah.

MR. RUTHERFORD: Yeah, that's what I said, that's assuming the highest --

DR. ZIEMER: What I'm saying is you don't have a guarantee that --

MR. RUTHERFORD: No.

DR. ZIEMER: -- badge number 13 was always the same person.

MR. RUTHERFORD: No. No. No.

MR. GRIFFON: I guess the other concern I would have is -- I -- you may not even be sure that

you have the -- the whole set of data there, you know.

MR. RUTHERFORD: That's true.

MR. GRIFFON: Right.

DR. MELIUS: Well, this may relate to --

DR. WADE: Could you put the microphone a little closer, please?

DR. MELIUS: This may relate to the same issue, but Table 4.1 in the evaluation report refers to the fact that of the 60 total claims that have been submitted from this group that -- if I understand that right -- you've completed dose reconstructions on 40 of them -- 41?

MR. RUTHERFORD: That's correct.

DR. MELIUS: Yeah. And so could someone sort of explain that table to me?

MR. RUTHERFORD: Well, I -- I haven't reviewed those claims to look at how many of them were compensated and how many were of -- I mean how many were greater than 50 percent, and a number of those could have also been workers that worked later in the years at Mound facility and they used some -- used their Mound bioassay data to back-extrapolate internal exposures. Now I didn't review those claims.

DR. MELIUS: Okay, 'cause -- 'cause there are -- I mean there -- there's actually a footnote there that -- I'll read into the record. (Reading) Only 16 of the claims just have MCC employment. The other claims ha-- the other 45 claims have MCC and Mound covered employment. And apparently -- well, it's unclear. Maybe Larry, you can explain that second sentence. I'm not sure exactly what the number re-- the clause refers to, so... I've got it right here.

DR. ZIEMER: Well, they were -- the ones that were greater than 50 percent with the usual underestimate procedure --

MR. ELLIOTT: If we look at only the --

DR. ZIEMER: -- that's adequate --

MR. ELLIOTT: If we look at only claims that have Monsanto work experience, there are 16 of those. And of those 16, there were -- there have been three dose reconstructions, two of which have been found to be greater than 50 percent and the other one has been held and sent back to us for this particular class. It was found non-compensable.

The others that you're talking about of the 61

have more Mound experience than they have Monsanto experience and they were reconstructed with the Monsanto (sic) exposure data.

DR. MELIUS: Uh-huh.

MR. ELLIOTT: That's how they were done.

DR. MELIUS: Okay. So --

MR. ELLIOTT: But they prob-- they have -- of course of that 61, if they have time in this class, they will be sent back to us for processing under this class.

MR. RUTHERFORD: Exactly.

DR. ZIEMER: Gen Roessler?

DR. ROESSLER: This is a side comment, but you don't normally care a lot about polonium-210. Recent -- recently various groups, the Health Physics Society, the CDC, Health Protection Agency in the UK, have all been trying to get information on how it's produced, where it might be used, the biological effects, the monitoring techniques. And it appears that you have become an expert --

MR. RUTHERFORD: I wouldn't say I'm --

DR. ROESSLER: -- on the subject --

MR. RUTHERFORD: -- an expert.

DR. ROESSLER: -- but -- but you certainly have

learned a lot about it in a --

MR. RUTHERFORD: Yes.

DR. ROESSLER: -- in a place where it seems very early on they recognized that this was an important radionuclide because they did do the bioassay. I find that very interesting.

MR. RUTHERFORD: Yes, they actually did some bi-- they also did some biological effects work, as well -- small scale, but some biological effects work there done with -- with animals.

DR. ZIEMER: All right. Wanda Munn.

MS. MUNN: Just a matter of curiosity, and I can't even find the numbers that I had seen originally in the SEC write-up. I remember there were a large number of bioassays that covered something like 1,600 employees --

MR. RUTHERFORD: 1,600 employees during the '43 to -- or during that '43 to '49 period.

MS. MUNN: During that period. But I had no feel for what the total number of employees at Monsanto was during that time. Do you have --

MR. RUTHERFORD: I have -- I mean what I've read -- the first year they ramped up, they were over 200 employees before the end of the

first year, and I -- but I -- I kind of anticipated that question. I went back and I haven't been able to come up with an exact number that they got up to, you know, for -- by the end of '49, but --

MS. MUNN: But do you have a feel for what range that would have been? I'm not looking for an exact number.

MR. RUTHERFORD: I think there were around 300 or 400 employees, and it -- and it steadily went up to when they switched operations to -- to the Mound facility, because if you look at the chronology of when the facilities were constructed or when they were designating Units I, Units II, Units III and Units IV, you know, Unit I, the first 200 people were -- were working in Unit I and then they recognized they were going to need more room and they add Unit -- Unit II was a completely separate facility that did rocket propellant work, but then Unit III was added and Unit IV was added because of the increasing -- and not only staffing, but the production processes and the amount of production that was required.

MS. MUNN: I guess the point of my question was

I was trying to get some feel for approximately what portion of the total workforce might have been involved in that 1,600 number that was the total number of individuals in...

MR. RUTHERFORD: I -- I could find that out for you.

MS. MUNN: Well, it's not that crucial. I just wanted --

MR. RUTHERFORD: Right.

MS. MUNN: -- I wanted to try to --

MR. RUTHERFORD: I would expect --

MS. MUNN: -- imagine in my mind whether it was more than half, less than a bushel, you know.

MR. RUTHERFORD: Yeah. Like I said, I would expect -- you know, I know the first year they were 200, and then as they increased to late '49, when they were shifting over to -- to the Mound facility, I'm sure it was eight -- 800 to 1,000 employees, could be as high (unintelligible).

MS. MUNN: Right. Thank you.

DR. ZIEMER: Jim, did you have an additional question?

DR. MELIUS: Yeah, I actually have some additional questions. One is, could -- since

the petitioner's not available here, could someone from NIOSH describe their interaction with the petitioner? Did they --

MR. RUTHERFORD: Yes.

DR. MELIUS: And as to whether you also reached out to other people who worked at the site and --

MR. RUTHERFORD: Yes.

DR. MELIUS: -- so forth, might be claimants, just for the record.

MR. RUTHERFORD: Yeah, what we -- what we did was actually, in addition to contacting -- or the contacts with the petitioner, we interviewed former Monsanto Chemical Company employee -- we actually set up a -- a couple of meetings and got some of the old -- older workers. They have a -- a group, a organization that -- I can't remember the name, Mike might know the name, I'm not sure -- but there's a group that -- they meet routinely and we got with them, we got with kind of their leader of that group. We got some names of individuals that worked during that period from them and we interviewed seven of those people that worked during that period.

DR. MELIUS: Thanks.

MR. RUTHERFORD: But also with the petitioner -- when we sent the petitioner the report, we also informed the petitioner of the upcoming Board meeting and obviously offered them opportunity to speak on behalf of their petition.

DR. MELIUS: Thanks.

DR. ZIEMER: Any further questions or comments?

DR. WADE: I would just ask again if the petitioner or anyone representing the petitioner is on the line.

MS. (UNINTELLIGIBLE): Yes, Mary Alice (Unintelligible).

MR. PRESLEY: There's somebody. Can you turn it up?

DR. ZIEMER: There may be somebody.

DR. WADE: Could you speak up, please?

MS. (UNINTELLIGIBLE): Yes, this is Mary Alice (Unintelligible), and I'm the petitioner for the class.

DR. ZIEMER: Did you have some comments, ma'am?

MS. (UNINTELLIGIBLE): Presently I don't have many more comments concerning the information that was given and I would like to -- I don't -

- I have in the library -- the amount of persons who were employed went up very rapidly so that the 1,600 number would be possible for that group from 1943 to 1949. After that there were many more who worked on different projects that probably would (unintelligible) at the Mound -- that you probably have found out from the Mound material. Outside of that, I'd like to thank the Board for accepting this petition and to the members of NIOSH who have contributed to the process to bring it up to this stage. And I never take anything for granted, so that I would hope for the people who are involved that they -- that it will succeed with going through the process. Thank you.

DR. ZIEMER: Thank you very much. Go ahead, Mark and then Jim.

MR. GRIFFON: Yeah, I -- just looking back at the internal dose question for a second, you have a lot of polonium data. It mentions here that you have some air monitoring data and I -- and -- and some breathing zone air sampling starting in '45, actually. I mean it -- I'm assuming a lot of that was gross alpha type

data.

MR. RUTHERFORD: Yeah, there was --

MR. GRIFFON: Were there any attempts made to (unintelligible) --

MR. RUTHERFORD: To try to bound that?

MR. GRIFFON: Yeah.

MR. RUTHERFORD: Yeah, we looked at that. The problem we had with the air monitoring data that we had, it was very, very spotty. I mean there were a few samples here and there, and it wasn't indicative of whether any samples were -- were general area, not always general area samples or even -- they could -- some of them even indicat-- looked like they were actually production type samples, more of samples to see how much material was in a -- in that vicinity of the production process, so -- so we couldn't -- based on the air sampling data that we had, we couldn't come up with a viable method.

MR. GRIFFON: And not enough information on source term --

MR. RUTHERFORD: Correct.

MR. GRIFFON: -- I'm assuming, same --

MR. RUTHERFORD: Correct.

DR. ZIEMER: And is it safe to assume then

there also is not particle size data --

MR. RUTHERFORD: No.

DR. ZIEMER: -- in the air samples.

MR. RUTHERFORD: No.

DR. ZIEMER: Did you have an additional --

DR. MELIUS: Yeah. My question concerns some of the discussion on page 30 of the report, and I guess my question's revolving around were there any acute exposure incidents that -- that occurred at the facility and -- I think as you know, we're --

MR. RUTHERFORD: Yes.

DR. MELIUS: -- another -- another workgroup of the Board is addressing that. We're sort of wrestling with how to define those and -- and so forth, so the first italicized paragraph on the bottom of that page drew my attention because it mentioned a -- an incident with a low blood count --

MR. RUTHERFORD: Yes.

DR. MELIUS: -- which was one of the sort of criteria we had talked about as sort of somehow indicating exposure. And I guess my question is is do these -- do the subsequent paragraphs at the bottom of the page, statements in a

report -- later report, do they refer to the same incident or these --

MR. RUTHERFORD: What they actually end up -- if you read them all, it ends up that the individual with the low blood count, they could find no radiological reason for that. The polonium activity in the samples were all low and they determined that it may -- it must be actual -- some kind of medical condition that was -- that they probably had low -- their -- normally have a low blood count. There's a number of reports on that, as well. But I think Dr. Melius brings up a -- you know, the good quest-- or good point about the incidents. I mean obviously with the polonium exposures that we've had in the news and recognizing this -- it only takes a small amount, the reason we did not, you know, look at a -- adjusting the -- you know, or looking at say an acute exposure scenario is because we said we could do polonium dose reconstruction. And from -- from that work part of it, and -- and the fact that we -- we -- in the records there were no records that indicated a low white blood count from an exposure of polonium that -- that we've

seen. They were looking at it. They definitely looked at -- they took blood analysis on -- on workers, but we did not see that.

DR. MELIUS: Thanks.

DR. ZIEMER: It appears there are no further questions. Do any of the Board members wish to make a recommendation relative to this petition and the NIOSH evaluation?

MR. PRESLEY: (Unintelligible) ready to accept (unintelligible).

DR. ZIEMER: Dr. Melius?

DR. MELIUS: I'll start by not offering a letter or a complete motion, but in terms of a recommendation is I would say I'm comfortable accepting the general recommendation of NIOSH for the lack of feasibility of doing dose reconstruction for this group. I still have some questions about the issue of what they can do, particularly whether they can reconstruct external doses adequately given some of the discussion here. I just think it's, and if you remember, we've been -- in several of our more recent recommendations we've been specifically addressing what -- what NIOSH can do, what --

what doses can be reconstructed. And I guess I -- I think it may be premature to -- at least for the Board to -- to commit on that issue, and I guess I also have some questions about the definition and -- and so forth which may be something we're going to discuss later in the -- sort of the general issues of how do you define the class in terms of making it sort of operational from a Department of Labor point of view -- perspective on this, but...

DR. ZIEMER: Well, okay. This is kind of a suggested motion to approve --

DR. MELIUS: Yeah.

DR. ZIEMER: -- but before we do that, let me ask a question that perhaps will help us clarify. If -- if the Board supports the recommendation of NIOSH, is it necessary that we address issues of, for example, can you do external? Because if someone is in the class but has a cancer other than a presumptive cancer, can they not go back -- in any event, regardless of what we say -- and petition for a dose reconstruction for that cancer, or do we have to say something in the document?

For example, if it was clear that they had

external exposure and -- or polonium exposure and -- and for that individual you could do a dose reconstruction and say found that the dose was say sufficient for -- for an award of a different cancer, is it necessary that we have said something about that in advance?

MR. ELLIOTT: Well, it's certainly your prerogative if you wish to say something --

DR. ZIEMER: But is it necessary?

MR. ELLIOTT: -- but we feel that we have -- have characterized what we can ex-- what we can reconstruct dose for and what we can't reconstruct dose for. We think it's important that -- that we be clear in saying what we can reconstruct dose for because that leads to a partial dose reconstruction for people who have a non-presumptive cancer. As we proceed in those dose reconstructions, however, if we find ourselves in a situation where we can't reconstruct something, we would again be back with the Board under the 83.14 part of the rule.

DR. WADE: Larry, before you go on, I think it's important that the Board understand exactly the flow of these cases prior to the

conduct of a partial dose reconstruction and whether or not there's a prerogative on the part of the Department of Labor to -- to send those cases to us. How will those cases that might warrant a partial dose reconstruction come to NIOSH?

MR. ELLIOTT: We submit -- upon each class designation, when it becomes a class, we submit a list of claims to the Department of Labor that -- from our limited perspective. We don't do the full development of these, but we identify those claims that have a presumptive cancer and send them back to Department of Labor. They then determine the eligibility of that -- if -- all of those claims, each individual claim in that set, for the class. We continue work on the remaining claims that we view as not having a presumptive cancer. And in some cases those get bounced back and forth between us and DOL if the person identifies that they have an additional cancer or something else changes in the demographics of the case.

I'd also like to say that as we move forward with our evaluation reports and right before we

present them to the Advisory Board and to the petitioner, the class definition is vetted on each one of these with the Department of Labor. And they spend a little bit of time trying to determine if in fact they can use the class definition to determine eligibility or if they can't. I get a -- I get a letter from the Department of Labor indicating their findings in that regard and those letters will of course follow suit in the posting of the (unintelligible) --

DR. ZIEMER: Larry, you suggested that those cancers that were non-presumptive you would continue to attempt dose reconstructions. Suppose a claim came to Labor after the SEC was approved that had a non-presumptive cancer --

MR. ELLIOTT: That would come to us.

DR. ZIEMER: -- would they automatically send that to you?

MR. ELLIOTT: Yes, they would refer that claim to us for dose reconstruction.

DR. WADE: In all cases.

MR. ELLIOTT: In all cases.

DR. WADE: There's no judgment to be made.

DR. ZIEMER: That's what I'm really asking.

MR. ELLIOTT: If it's a non-presumptive cancer or has less than 250 days in the class, they would send it to us for dose reconstruction.

DR. ZIEMER: Okay. And the Chair will allow Mr. Miller, who's -- who is squirming in his seat --

DR. WADE: This is an important point as we move forward.

MR. MILLER: Can I get some clarification perhaps?

DR. ZIEMER: (Unintelligible) legal issue you may want to clari--

MR. MILLER: This is Richard Miller. In the Mallinckrodt Chemical first -- first SEC covering the -- what is it, '43 to --

UNIDENTIFIED: '47.

MR. MILLER: -- '47 time period, the Board did not specify in its SEC designation that external radiation dose could be reconstructed. It did in the second Mallinckrodt SEC class, but it did not do so in the first one. Department of Labor was then asked well, why is it you're not sending those non-presumptive skin cancer cases back to NIOSH for dose reconstruction to do the skin cancer cases.

And their answer is is because the HHS designation, based on the letter that came up from the Advisory Board, did not say that external penetrating dose could be reconstructed. And as a result, those cases were simply set aside and not referred for dose reconstruction. Is that -- is that a correct characterization of what happened? 'Cause that's certainly what the paper trail looks like, and if that is --

DR. ZIEMER: Actually that's the -- sort of the question I'm asking --

MR. MILLER: Good enough, right --

DR. ZIEMER: -- and I'm wondering if we know.

MR. MILLER: -- and I think that's why we need some clarification on that.

DR. WADE: It's important -- we should take a moment to -- while they're caucusing, remember, this is an advisory committee to the Secretary of HHS. The word of this committee is not binding or necessarily influential to the Department of Labor, so we have to be sure that the issue is effectively dealt with in your recommendation to HHS --

DR. ZIEMER: Right --

DR. WADE: -- and that's why this question --
DR. ZIEMER: -- the question --
DR. WADE: -- becomes important.
DR. ZIEMER: -- arises. Larry?
MR. ELLIOTT: Well, Richard Miller takes us back to our earliest experience, and I would say it was, you know, a learning experience and we -- we evolved, all of us evolved and the process and the program evolved from that experience. However, I would -- I would like to clarify for you what really happened, I think, in that first period.
It was determined that the data was unreliable in the early Mallinckrodt period -- unreliable. So DOL came at us and said well -- it's not the Board's letter, by the way; it's the Secretary's designation that carries the weight here, and the Secretary's designation indicated that the data were unreliable, so we couldn't reconstruct any type of dose in that early time period.
Then I think we went into the next class, and the next class we were -- we were -- we were hindered in our ability to reconstruct internal dose, but we were able to reconstruct external

dose. And so there was great confusion and frustration among the claimants who had time in one class, not enough time in the other class, and they got caught in this situation -- a catch-22 -- where we couldn't reconstruct any dose in the first class 'cause it was unreliable, and we could reconstruct only external dose in the second class.

DR. ZIEMER: Thank you.

MR. ELLIOTT: Does that help? I think that's correct.

DR. ZIEMER: That's -- that's helpful. Richard, did you have an additional comment --

MR. MILLER: Because in the February of 2005 Advisory Board meeting held in St. Louis, Jim Neton was specifically asked by the petitioner can NIOSH reconstruct external dose, will -- can a skin dose be reconstructed, and Jim said yes, we have enough data to reconstruct dose. Now if you have enough data to at least do a minimizing calculation, it would seem to me that you would want to -- just as in this case here -- you would want to at least attempt a minimizing dose, even if it wasn't a complete external dose reconstruction. But in

Mallinckrodt, the unfortunate thing that happened was that I think our friends in the Labor Department perceived this as having more than one characteristic. One characteristic that was in play was could you do the external dose; Jim Neton said yes. When presented with the administrative record of this body to the Labor Department showing Jim's quote, they said that there's no -- has no legal weight whatsoever. And the response was but wait a minute, this was included in the administrative record that was transmitted to the Secretary of Health and Human Services. How could this be? And the answer is the HHS designation is the only thing that matters.

The second thing that was going on was that our friends in the Labor Department were trying to prove a point to the Board. And the point they were trying to prove to the Board is is that for the non-presumptive cancers, those people were going to be devoid of a remedy, and they wanted to make that point as precisely and as sharply and as pointedly as possible. And so that was coinciding as a policy matter, I think, with how they chose to interpret it. So

it seems to me -- maybe I'm wrong here -- that the greater clarity that goes to the Secretary, the better, because your SEC evaluation report had a set of boxes in the very back of the table, and in that 1943 to '47 time period the external dose could be reconstructed. And they said but that's not what mattered. What mattered was the HHS designation.

DR. ZIEMER: Well --

MR. MILLER: I just want to be clear, Larry, that --

DR. ZIEMER: Yeah.

MR. MILLER: -- there was more at play than what meets the eye.

MR. ELLIOTT: Yeah, but at the end of the day, Jim Neton's professional and technical expertise was not the weight that carried forward this Board's decision and recommendation, nor the Secretary's designation. You're right, it's in the record and we passed the record along. But be that as it may -- we take this very seriously, too, Richard, and we want to make sure we have the right words, too. And we have -- we strive to that end --

DR. ZIEMER: That's fine, I understand the issue now. It -- it appears to me that it would serve the Board well where we have this kind of situation to amplify what NIOSH tells us in their recommendation so that even though -- clearly it's the Secretary's recommendation --

DR. WADE: Right.

DR. ZIEMER: -- that carries the day, but it may be helpful for our record to be very clear -- not only on an SEC and its definition, but any -- any particular subsets where NIOSH has already indicated that they believe they can reconstruct dose -- that we either accept or not accept that and that be in the record, as well.

Dr. Melius?

DR. MELIUS: And my issue here is that I'm not -- would not be ready to accept or not accept this recommendation 'cause I -- I mean there are some ques-- you know, I think some significant questions 'cause we haven't had the opportunity to evaluate the data nor sort of put it through the same steps that were -- would normally be done if we were evaluating it

for an SEC, and I think we have to hold the same -- hold that data to the same level of review and confirmation --

DR. ZIEMER: Right.

DR. MELIUS: -- for that. And I don't know if I understood, LaVon, correctly. Is it -- NIOSH hasn't really done that either. I mean it's --

MR. RUTHERFORD: No, but --

DR. MELIUS: -- too early.

MR. RUTHERFORD: -- I think what's important to note that -- that whether we say we can -- can do or not do the external beta/gamma does not affect the class, because the class is the whole anyway. So the only one it's going to affect is whether we can or can't do it for the non-presumptive cancers.

DR. ZIEMER: Or a particular individual.

MR. RUTHERFORD: I think that's -- exactly.

DR. ZIEMER: Well, if the Board wishes to -- there's a couple of options. One is to delay an actual decision till say tomorrow or the next day. Another is to make a -- what you might call a preliminary decision you want to support the SEC, and then develop the wording before Wednesday or -- that would be one

possibility. Another is to simply delay any action. What's the pleasure of the Board? Wanda.

MS. MUNN: It would be my desire to support the SEC. It seems fairly obvious to me that whether we can or cannot accurately calculate dose reconstructions for a portion of the class, if we cannot do that for all of the class -- which I think that's what I just heard --

MR. RUTHERFORD: Yes.

MS. MUNN: -- we can't do that for all the class -- then it follows that we must therefore accept all of the class cannot be adequately reconstructed and therefore a Special Exposure Cohort must be granted. I understand a portion of what the concerns are here, but I -- and I understand the fine points within the agencies that are involved in doing the dose reconstruction. But from a Board point of view, it is our job to define whether the class can or cannot be properly reconstructed. I believe what I've heard here is the entire class cannot properly be reconstructed and therefore I see no reason why the Board should

not continue with its assertion that this SEC can be recommended to the Secretary.

DR. ZIEMER: Is that a comment or a motion?

MS. MUNN: That's a motion.

MR. PRESLEY: I second that motion.

DR. ZIEMER: A motion to approve the SEC and a second, and the Chair will rule that this will be subject to some final wording 'cause we have a fairly elaborate --

MR. PRESLEY: Right.

DR. ZIEMER: -- sort of standard set of wording and we'll start to ask Jim to help with that wording, too, 'cause he has the key -- the key stuff on his computer, but --

DR. WADE: I would like to speak to this issue, if I might. And I'm not speaking for or against because that's not my prerogative, but I'd just like to talk for a couple of minutes and paint a picture for you.

We've heard by reference that the Secretary's designation is what will be looked at by the Department of Labor, so the Secretary's designation holds weight, not necessarily the recommendation of the Board. When the Board made its recommendation on LANL several

meetings ago, it did so in an interesting structural way. It had a very rigorous definition -- designation of a class, and then it listed supporting information, and then there was record to support that. Given the fact that the Secretary's designation is paramount, and the Secretary will be influenced by the Board's recommendation of designation, I would say it's important for the Board to be as inclusive in its designation as possible and avoid the possibility of having a designation and then have other items that support it. So to the degree possible, I think you should be as inclusive in your -- your recommended designation as possible, hopefully to influence the Secretary, and it's the Secretary's designation that carries weight -- if that makes sense to you.

DR. ZIEMER: I understand what you're saying. I guess my question is is -- and it's the original question -- how important is it for the Board's record to reinforce what NIOSH has told us on what it can or cannot do?

DR. WADE: I think from my perspective, given the fact that it could be important, I would

carry that forward and I would carry it forward within the recommended designation.

MR. GIBSON: Dr. Ziemer?

DR. ZIEMER: Yes, Mike.

MR. GIBSON: I certainly support the motion of the SEC, but -- and anyone who deserves compensation should get it. But on the other hand, I -- you know, if there's someone that doesn't have one of the presumptive cancers and this takes away their opportunity to file for a claim -- I mean I -- I think the ultimate answer lays with the Department of Labor, doesn't it? No matter what the Secretary of Health and Human Services puts forward to the Department of Labor, if someone submits a claim under B that does not fit this class designation or this cohort designation, do they get a chance to be compensated or are they just left out in the cold?

DR. ZIEMER: Well, I think that's the original question we were asked. I think -- I think Larry indicated that those that had non-presumptive cancers, at least if they're in the loop, NIOSH continues looking at them. And I was concerned about whether new ones would come

through, and I think you are assuming that they will --

MR. ELLIOTT: No, we're seeing -- we're seeing new claims come to us on classes that have already been established, and we're doing dose reconstructions on what we can reconstruct. It turns out to be what we call a partial dose reconstruction, but we have seen some -- some of those --

DR. ZIEMER: So Labor is sending them forward (unintelligible) --

MR. ELLIOTT: -- individuals get compensated, but at least they get an answer if they -- if they don't.

MR. GIBSON: But did you say new cases?

MR. ELLIOTT: New cases, yes.

MR. GIBSON: But what -- what of those of the existing class that don't meet all the criteria of the SEC?

MR. ELLIOTT: Then -- then we proceed with our dose reconstruction effort on those up to the point, you know, that we can. If we can't reconstruct neutron dose, we can't do that, and we reconstruct what we can. New -- let me go over this one more time. I see -- I see a -- I

think you're -- may be confused, maybe I'm confusing you, Mike.

For these 16 claims that we see fitting this class for Monsanto, that only worked at Monsanto -- I don't know how many of those have presumptive cancers, but we would take those out that have one of the 22 cancers and send it to DOL, send it back to DOL, and they'll work that up as an eligible claim under the class. If for some reason they find it not to be an eligible claim in the class, they'll send it back to us for dose reconstruction.

The remainder of those 16 that didn't have a presumptive cancer, one of the 22, once the class is designated and becomes a class, we would proceed with completing dose reconstruction for whatever was found that we could reconstruct. We would not be able to reconstruct that type of dose that, you know, in essence established the class.

Does that help? I think I've said it two or three different ways now, but I've said it the same -- with the same intent and meaning behind it.

MR. GIBSON: And may-- maybe I'm not saying it

clear enough or maybe I'm not hearing you right, but a person does not meet the criteria, say -- say the SEC gets passed, person does not meet the criteria of -- for whatever of the reasons. They turn -- they turn around and file a -- the subsection B, subtitle B, send it to the Department of Labor. Is the Department of Labor going to sit on it or are they going to send it to you?

MR. ELLIOTT: If it's a non-presumptive cancer, they will refer it to us for dose reconstruction. If it's a presumptive cancer, we'll never see it. It'll be processed by DOL as an SEC case, just like we -- just like what happened for the original four Congressional classes in the Special Exposure Cohort. We never saw a bunch of those claims from Pike-- from Piketon, Ohio, from K-25, Paduc-- you know, we didn't see any of those. But we did see claims come to us from DOL that were non-presumptive cancers that we had to reconstruct dose for.

DR. ZIEMER: Okay?

DR. MELIUS: I have --

DR. ZIEMER: Jim.

DR. MELIUS: Yeah, I -- I think the question -- at least one of the questions -- is does it make any difference whether we reach a finding that it is possible to reconstruct, you know, external doses or some other -- such that it is --

DR. ZIEMER: Exactly, that's the point.

DR. MELIUS: -- in the context. I think that's what we're trying to -- and -- in a la-- two or three meetings ago I think -- statement at least from Larry, and I thought reinforced by the Department of Labor, but my recollection may be wrong there, was that it was important that we do that. So I think that sort of --

DR. ZIEMER: Well, I know we did it in at least one case --

DR. MELIUS: No, we --

DR. ZIEMER: -- and maybe in two, and -- and the -- the record that goes forward is not just our recommendation but the NIOSH evaluation report goes forward with the -- with the charts, too. The Secretary has all of that information and --

DR. WADE: Correct.

DR. ZIEMER: -- it is part of the record, as

well. Larry.

MR. ELLIOTT: I was just going to say we've done a number of these of late where we've tried to be very specific with what we felt we could reconstruct dose for and -- and segregate that from what we couldn't reconstruct dose for. The reason that's important is so that those non-presumptive claims -- we can continue our work on them --

DR. ZIEMER: And I think --

MR. ELLIOTT: -- (unintelligible) reconstruct (unintelligible) --

DR. ZIEMER: -- Jim, you -- your concern is kind of the flip side. If they've said they can reconstruct dose, do we actually know that's the case on those.

DR. MELIUS: Yeah, be-- because very often they -- they have a belief that they can do it -- I mean it may be sound technical grounds for -- I'm not dismissing it, but they really haven't gone through the steps of -- of actually doing it in some of these cases, and I think this is an example of those. And certainly just based on the little information that was presented here, I -- I -- if this were presented to me as

an SEC and, you know, say all the -- all the other internal doses, everything else could have been reconstructed and they presented -- but this is an external dose, I -- based on the information so far, I -- and they said they could reconstr-- I would have serious questions about it. I'd say, you know, give us a lot more evidence on it. So I would be reluctant, as a Board, to endorse that -- that finding 'cause I don't think we've been presented with enough information to be able to support that particular finding and -- based on what they've done so far. Now others may feel differently, but I'm just saying that that would be, therefore I -- the question I think is sort of procedurally -- is -- I'm trying to understand is does it make any difference whether we make a statement about what they can do in the context of putting forward an SEC recommendation.

DR. ZIEMER: Yeah. I look at it a little more generic than that. I think where they say they can reconstruct dose is in the context of there are certain kinds of data, monitoring data, available. It var-- it still could occur that

in an individual case -- an individual case, you could not reconstruct dose.

DR. MELIUS: Uh-huh.

DR. ZIEMER: But it seems to me that -- that generically, and that's what we're talking about here, that there are certain kinds of -- of information in the records that would say okay, I can do, for example, external dose if it's gamma, but I can't do the neutron.

DR. MELIUS: Uh-huh.

DR. ZIEMER: I mean just the nature of the records.

MR. ELLIOTT: Right. I take you back to what our rule says, and the rule says it's -- we can reconstruct dose with sufficient accuracy if we can provide them a maximum bound. And the data that we've seen on what LaVon has presented to you, we feel that that enables us to reconstruct dose as we -- as we see the data, as we look at the data. I don't think, in my opinion, it makes -- it doesn't put us in a bad position if you don't comment on what we are saying we can reconstruct at this point. No, we have not brought to you a full-fledged set of dose reconstruction examples. We have not

spoken in depth about representativeness of the data. We've only given you a cursory review of the data at hand, and we're asking you to, you know, take it on our -- on face value that, you know, as we go through this and approach it, we can do what we say we can do -- or we're going to identify that we can't.

DR. MELIUS: Yeah.

MR. ELLIOTT: But we think it's important where we've stumbled across this and we can't reconstruct dose, we want to get it done and get it in front of you now.

DR. ZIEMER: And I'm wondering if we couldn't word it in such a way that recognizes that there may be cases for non-presumptive cancers where indeed the dose can be reconstructed, without necessarily getting into the issues of data quality and all of those kinds of things, sort of the flip side of that, which basically says in -- it's -- it's trying to keep the door open, I think is what we're saying, to keep the door open for the non-presumptive cancer cases that may have the opportunity to go forward.

DR. MELIUS: Yeah.

DR. ZIEMER: If that helps keep it open. Maybe

it doesn't help.

DR. MELIUS: I think that is the question 'cause I think -- if you remember, when we started we assumed that we didn't have to say anything about that, with the original. And then we said no, let's -- on advice, we thought it was important that we did include information with a very specific recommenda-- finding that we agreed with NIOSH's findings that they could reconstruct dose.

Now we're hearing well, maybe it's not as important as we thought it was, and I'm just trying to figure out what's the best way of communicating with that.

DR. ZIEMER: Yeah.

DR. MELIUS: If it is important, then I -- then I think the subsidiary question is well, as we communicate that to the Secretary, should we wait until we have the full package together or -- or do we go at -- or sort of partially now and -- and do -- the other -- I mean there's a whole bunch of --

DR. ZIEMER: Yeah.

DR. MELIUS: -- different situations --

DR. ZIEMER: Well --

DR. MELIUS: -- and it's --
DR. ZIEMER: -- I'm sort of thinking of it in these terms: that if we could state in the pet-- in our recommendation that we recognize that NIOSH believes that it can reconstruct doses in -- in certain cases, and that in such cases we encourage the claimants to go forward -- or something to that effect --
DR. MELIUS: Yeah --
DR. ZIEMER: -- without -- if that helps keep that door open. Maybe it doesn't make any difference at this point, we don't know.
DR. WADE: I think it does. I think it's a good thing to do, and my long-winded statement is I think to do that within your recommendation of a designation increases the probability that it will make its way into the Secretary's designation and then be part of the final record.
DR. MELIUS: Uh-huh.
DR. WADE: That's all I'm saying. I think it's important that you do it. The last time you did it, you did it -- you made your designation, then you listed supporting reasons. I think it would be better to think

of framing it within the designation itself so that it goes forward as part of the designation.

DR. ZIEMER: And I'm -- I'm saying that I don't think that we have to say that we have confirmed that they can do that.

DR. WADE: That's right.

DR. ZIEMER: But that we recognize that they believe they can and therefore it should be considered, or something to that effect.

DR. MELIUS: Yeah, and that's --

DR. ZIEMER: Yeah, yeah. Jim.

DR. LOCKEY: Paul, I agree with you 100 percent, that we just put a statement in -- boilerplate statement that says for SE-- SEC class that's been approved, those petitioners that have a non-presumptive cancer still have an avenue -- additional avenue to pursue --

DR. ZIEMER: Okay.

DR. LOCKEY: -- (unintelligible).

DR. ZIEMER: Wanda, did you have an additional comment?

MS. MUNN: It was more of a miscellaneous thought.

DR. ZIEMER: I've got a lot of those, too.

DR. WADE: More as you get older.

MS. MUNN: And I'll have to even think about my thought for a little bit. It concerns me that -- the wisdom of our getting into parsing each of these SECs after they've been so clearly identified and parsing what can be done and what can't be done. NIOSH is very clear in their report to us what they can do. I -- and it seems to me very clear in -- in telling us what they cannot do. I -- I just don't see the wisdom of getting in a position where we are asking them to prove that they can't do what they've already said they can't do. And if -- if we're not asking them to prove what they can't do, then since the class is very clearly defined here -- as I said earlier -- there seems to be no reason to not go forward with the SEC. They said what they can do. They said what they cannot do. What they cannot do is encompass all individuals who fit the class as defined.

DR. ZIEMER: Yeah, and I think we all agree on that part of it. Perhaps what we can do -- let's move ahead on this. I'm going to call for a vote on this motion, recognizing that

it's a kind of general generic motion to approve or disapprove the SEC, with the caveat that the exact wording of the motion will come back to us before the end of this meeting and you will have a chance to see what those words look like if there are any qualifiers in it that -- that can lead to levels of either comfort or discomfort -- if that's agreeable. So what we are -- basically would be voting on is not the issue of any additional caveats, but the issue of support for the SEC. Comment (unintelligible).

MR. GRIFFON: Is it necessary to call for a vote right now? I'm just wondering if we can --

DR. ZIEMER: No, we can table -- you can call for a tabling of the vote, if you wish. If we approve this vote, it would simply say we're going to go ahead and work on the exact wording of what it looks like, and -- and we can -- we can do that anyway and reserve the vote till we have the wording. That's --

MR. GRIFFON: I think we should vote --

DR. ZIEMER: -- if you want to -- if you want a motion to table, we can do that.

MR. GRIFFON: Well, I'm not doing that yet, but I think we should -- I would like to vote at this meeting for sure, but I -- I think I want to ponder -- the other question I have on this is not only -- I think we -- the -- the way that it was just stated about how to handle the areas where you can do dose reconstruction satis-- I think we can work with the language around that. I still have some questions about the internal dose items that NIOSH says they can't do. And quite frankly, I think I want to at least mull that over a little more, only because I think there's a equal treatment issue here. I think we have to be careful that there -- there's some other sites where there've been some pretty thin amounts of data and we've -- NIOSH has determined that they can do dose reconstructions. So I -- when LaVon says -- and it might be in the report that I didn't go through as thoroughly as I should have before this meeting, but when NIOSH says there's very little air sampling information, very little -- I mean I have no reason not to believe them, but I -- for myself, I'd like to at least take a closer look at that. And if they have any

supporting documents that we might look at in that regard in the next two days or next one day, I'd rather wait and see that and then make a call on that, simply because I think that we -- we also need to consider this in the larger picture, that we're not -- that we're consistent in the way we're ruling on these things. If it's -- if it's very little data, what do we mean by very little data; what do we mean by enough is enough when we review, you know, sites like Rocky Flats for lengthy periods of time. So I -- you know...

DR. ZIEMER: Are you making a motion to table?

MR. GRIFFON: Well, I -- I'm listening -- if Wanda has a response, I'll listen to that before I make any motion.

DR. ZIEMER: Do you have any comment?

MS. MUNN: (Off microphone) No, Jim's (unintelligible) --

DR. MELIUS: I was going to second his motion. I was waiting --

MR. GRIFFON: Then I don't make a motion to --

DR. MELIUS: I actually had a separate comment, but I'll...

DR. ZIEMER: A motion to table?

MR. GRIFFON: I'll make a motion to table.
DR. ZIEMER: Until? Not indefinitely, until...
MR. GRIFFON: Before the end of this meeting.
DR. ZIEMER: Okay. It's got to come off the table --
MR. GRIFFON: Yeah.
DR. ZIEMER: -- before the meeting's over. Is that a second?
DR. MELIUS: I'll second that.
DR. ZIEMER: This is a non-debatable motion. We have to vote immediately. All in favor of tabling, with the understanding that the motion comes off the table before the meeting is over, say aye?

(Affirmative responses)

Wait a minute, let me call for a show of hands so we can get a count.
All in favor of tabling -- one, two, three, four, five.
All opposed to tabling? One, two, three -- then the ayes have it. The motion is tabled till later in the meeting. Thank you.
DR. MELIUS: I have some other -- can I ask Brant some more questions?
DR. ZIEMER: Yes.

DR. MELIUS: On something else.
DR. ZIEMER: Oh.
DR. WADE: You mean LaVon?
DR. MELIUS: But relevant to this. I'm just trying to understand what it means in the definition you put a -- by monitored, or should have been monitored. What -- what are the -- what is the factual basis for that relevant to this particular --
MR. RUTHERFORD: Well, that was based -- that's basically individuals that had -- would -- under today's criteria, should have been monitored. Okay? If you were to look at it that way.
DR. MELIUS: Yeah.
DR. ZIEMER: Well, that wording comes out of the regulation, I believe.
MR. RUTHERFORD: Right.
DR. MELIUS: Well, but --
MR. GRIFFON: But do we have enough -- well, go ahead.
DR. MELIUS: Yeah, I'm just trying to understand the -- the -- how that would be applied in -- in this particular circumstance based on what -- the evaluation that NIOSH has

done of this facility.

MR. RUTHERFORD: Well, I don't think NIOSH -- I don't think our evaluation has -- has excluded anyone, with the exception of Unit II where they -- that was the -- where they did the rocket propellant and didn't work with any radioactive material. So anyone that worked in those other buildings would be part of that class, because we did not have the information that we could separate anyone out of that class in those facilities. Do you -- do you --

DR. MELIUS: No, I'm understan-- and I guess my question -- reason I wanted to bring this up is -- is -- then I'd be interested in Larry's comments or comments from anybody else that's -- from DOL, is should we be more specific in our definition of the class, 'cause I think, you know, based on what you presented in your report, one certainly would -- I think I'd agree that you'd exclude people from that one building 'cause it --

MR. RUTHERFORD: Well, we didn't include that building in -- in the class definition.

DR. MELIUS: Okay.

MR. RUTHERFORD: Unit -- it goes Unit I, III

and IV.

DR. MELIUS: Okay.

MR. RUTHERFORD: So Unit II is excluded from that building -- from that class.

MR. ELLIOTT: Monitored or unmonitored comes out of language that was used in the Congressional mandated SEC classes. It shows --

MR. GRIFFON: Monitored or should have been monitored.

MR. ELLIOTT: Monitored or should have been monitored, I'm sorry. And as LaVon indicated, we interpret that to mean unmonitored not only in the early years, but should have been monitored by today's standards, or should have been monitored if they -- they went into the building where the -- the exposure occurred, but they were never monitored. So it's -- it's more inclusive to use that language. If we don't use it, we find ourselves dealing with DOL on excluding people.

DR. MELIUS: No, I -- well, in this case where all the external monitoring is essentially -- you know, can't be identified individuals, maybe a lot of people that were monitored that

you have no records of being monitored.

MR. ELLIOTT: That's possible. That's very possible --

DR. MELIUS: Yeah, yeah.

MR. ELLIOTT: -- but by listing the buildings where the radioactive material was handled and processed, then all a person has to do -- all a claimant has to do as -- my understanding in watching DOL process these, is provide some sort of affidavit or some verification that they were present in those buildings.

I think you asked also about does it have benefit to place in your language -- your definition language -- what type of exposure. And I think we went down this path with thorium on one class definition and we ended up going back and forth with DOL on that, too. I don't think it benefits a lot to specify the type of -- of radioactive material that can't be reconstructed. I think that causes more problems than it causes benefit.

MR. GRIFFON: Yeah, I agree with that. I'm not sure -- well, I'm -- I'm just wondering how DOL interprets monitored or should have been monitored. I don't think mere presence in

those buildings would constitute meeting that criteria, would it? 'Cause you're talking about current standards, so mere presence -- if they were an administrative worker, for instance, within that building but not -- are they going to make a subjective judgment based on job title or other factors. I think they do, don't they? Or...

MR. ELLIOTT: They do, and -- and we've been conversing with DOL about this in a number of class situations. Guards come up -- we believe guards are exposed in the -- once they walk in the building, they're exposed. Okay? An administrative person who sits in an office in one of these buildings has a potential for being exposed. You know? If you're inside the four walls of a building, you're exposed. That's our take on it. That's what we argue with -- with these folks, and they haven't been receptive to that, to this point, so...

MR. GRIFFON: So -- so do we ha-- I mean is it worth us in our write-up to be more specific, you know, if we say, you know, we understand this to be presence in the building?

MR. ELLIOTT: I think this goes back to what

Dr. Wade was trying to help you with before in his commentary. Be as specific as you can, and that -- hopefully that will find its way into the Secretary's designation.

MR. GRIFFON: Okay. Thank you.

DR. ZIEMER: Thanks. Okay. Then we're ready to move on to the next item.

MR. PRESLEY: Who's -- who's going to come up with the wording for the motion?

DR. ZIEMER: Well, Jim's going to take the lead on it --

DR. MELIUS: I'm starting it --

DR. ZIEMER: -- because he has the basic outline, but others can suggest.

DR. MELIUS: (Unintelligible) to my neighbor.

DR. ZIEMER: Let's see how we are.

MR. PRESLEY: (Unintelligible) more than happy to.

DR. WADE: You want us to take a break now?

DR. ZIEMER: Well, I think we -- yeah, we've gone a little longer than we'd planned on LaVon -- LaVon, if it's all right, we'll take our ten-minute break here -- comfort break -- and then resume.

MR. GRIFFON: Thank you.

DR. ZIEMER: Mark will take a ten-minute comfort break.

(Whereupon, a recess was taken from 2:43 p.m. to 3:00 p.m.)

GENERAL ATOMICS SEC PETITION
MR. LAVON RUTHERFORD, NIOSH/OCAS

DR. ZIEMER: Okay, we'll resume our deliberations now. Our next item for discussion is the SEC petition for General Atomics, and LaVon Rutherford will present the NIOSH evaluation report. Again, we should ask if there are any petitioners on the phone for this particular discussion. Anyone representing General Atomics?

(No responses)

Apparently not, but there -- LaVon, please proceed.

MR. RUTHERFORD: All right, thank -- can everyone hear me still? Okay.

Thank you, Dr. Ziemer, Board, for giving me the opportunity to speak on behalf of our evaluation -- the General Atomics Special Exposure Cohort petition evaluation.

All right. The General Atomics petition is a petition that -- where NIOSH determined that dose reconstruction was not feasible for a -- a

claimant, and we sub-- informed that claimant that dose reconstruction was not feasible and so when we informed the claimant that it's not feasible, we sent the -- that claimant a petition form A and we started the 83.14 process.

Unfortunately my notes got messed up.

(Pause)

When we -- when we determine that we cannot do dose reconstruction, we go through the 83.14 process, what we look at during the evaluation is we're looking for basically defining the boundaries of the class. We've already determined we can't do dose reconstruction for an individual. Now we need to find the boundaries of the class that we've -- we've started to identify.

The 83.14 process is the same process in that we look at two -- the two-pronged test. We look at feasibility whether we can do dose reconstruction, and then we look at health endangerment, was -- is there a potential likelihood that such radiation doses may have endangered the health of those...

General Atomics is a private contractor for the

AEC from 1960 through 1969. They operated under the license under the Atomic Energy Commission and later under the State of California. They performed a number of radiological operations, both for the AEC and commercial operations as well.

As I mentioned, they performed a number of operations for the Atomic Energy Commission. They processed unirradiated scrap of depleted uranium, normal uranium and highly enriched uranium. They did hot cell work. In that hot cell work they looked at a -- they did examinations of Department fuels, structural materials, and they also did a number of -- or of other tests.

Other commercial activities that were performed during the class period are developing and fabricating reactor fuels, reclaiming highly enriched uranium, fusion research, operating experimental criticality facilities, and operating other experimental facilities.

The radiological sources, highly enriched uranium and thorium from fuel fabrication, plutonium oxide from research and development work, activation products and fission products

from the irradiated reactor fuels. Our information available for dose reconstruction, had limited bioassay from the 1960 to '63 period. In 1963 they started a routine bioassay program and then -- however, that bioassay program focused more on uranium. There was no thorium bioassay monitoring during the period. There's some whole body monitoring data that's available in 1966 and it's spotty from that point on. However, the whole body counting was -- was focused on workers that worked in the highly enriched uranium and ur-- divisions. They were not -- they did not do any whole body monitoring on thorium workers. External monitoring data, we have external monitoring data, both beta/gamma and neutron data, through the entire operational period. We also have direct and indirect dosimeter data -- basically the little, you know, direct reading dosimeters for -- for operations. We have extremity do-- data, finger rings. We also have data that we received that -- when we looked through the claimant files we had indications that they were required -- for annual X-rays.

Petition overview, NIOSH determined that we were unable to do a -- a complete dose reconstruction for an existing claim, as I mentioned earlier, and on June 30th, 2006 a claimant was notified that dose reconstruction could not be completed and was supplied a Form A. The Form A is a -- is -- is basically a form that allows the petitioner to petition for a -- for being added to the Special Exposure Cohort. Petition was submitted to NIOSH on July 17th, 2006.

NIOSH concluded that NIOSH lacks monitoring, process or source information sufficient to estimate the internal radiation doses from thorium exposures from General Atomics employees for the period of January 1, 1960 through December 31st, 1969, which is the entire covered period.

NIOSH has sufficient information to estimate the internal doses from uranium, and occupational external exposures including medical exposures for that period.

NIOSH has determined that it is not feasible, as I said, to estimate with sufficient accuracy internal radiation doses, and that the health

of the covered employees may have been endangered.

The evidence indicates that workers in the class may have been ex-- may have accumulated intakes of thorium during the covered period.

Our proposed class -- and I'm not going to read that 'cause there are a number of buildings, but these buildings are associated with radiological activities.

Our recommendation is for the period of January 1, 1960 through December 31st, 1969 we cannot do dose reconstructions for that period, or it's not feasible with sufficient accuracy, and that -- we indicate that health was endangered. And that's it.

DR. ZIEMER: Okay. Thank you. The -- this petition is focused largely on thorium.

MR. RUTHERFORD: That's correct.

DR. ZIEMER: And as I look through the General Atomics list of facilities -- for example, the linear accelerator -- is there any reason to believe there would be thorium in that facility?

MR. RUTHERFORD: Actually they did do accelerator work where they actually --

DR. ZIEMER: They activated thorium?
MR. RUTHERFORD: Yes. Yes.
DR. ZIEMER: Okay. What about the analytical health physics lab? If --
MR. RUTHERFORD: Well --
DR. ZIEMER: -- let's see, it's listed as -- I'm looking here --
MR. RUTHERFORD: I think what --
DR. ZIEMER: -- yeah, Building 10 -- Building 10, if that's truly a radioanalytical lab, by definition you almost have to have really low levels in there in order for it to do its job, so --
MR. RUTHERFORD: I think our determination was that we really didn't have enough information to -- to separate it out --
DR. ZIEMER: Oh.
MR. RUTHERFORD: -- so we -- we left it in there.
DR. ZIEMER: So you don't really know what they --
MR. RUTHERFORD: No.
DR. ZIEMER: -- were doing in there (unintelligible).
MR. RUTHERFORD: Well, we know that they did do

-- they -- that thorium was in the -- and -- I mean they did some analysis work in there, but -- but as you said, I mean, typically you're not -- you don't see large quantities. However, we didn't have enough information to really make that determination.

DR. ZIEMER: Okay. Other questions on this particular one? Yeah, Jim.

DR. MELIUS: Well, I guess my question's along the same lines as -- as Paul's. I mean I had trouble understanding the basis for why different buildings were included or excluded, so my -- my question would be what -- what was the basis of your investigation and your information basis for this? Why --

MR. RUTHERFORD: Well --

DR. MELIUS: -- effort to look at this facility.

MR. RUTHERFORD: If you look at -- we didn't really exclude buil-- what buildings we excluded were buildings that we knew were administrative buildings. We had good documentation to support that they were administrative buildings. We had enough information to -- to identify that -- that

thorium operations were conducted in -- in a large number of facilities and thorium -- thorium was used in num-- in a lot -- a lot of different processes and -- and that we -- and from that that we couldn't make enough -- there was not enough information to actually pull any of these in -- buildings that we had identified in the class out, so those are all facilities that radiological work was being conducted at the time.

DR. MELIUS: Yeah, but -- but what I guess my question is, at least for the record, what was the -- but how vigorously did you look for information, I guess is -- is the question.

MR. RUTHERFORD: Well, we -- we looked through a number of sources, like we looked at our site research database there. We -- we looked in -- you know, we contacted General Atomics. We looked at our claimant files, you know, so a number of sources were looked at for information and there was no internal monitoring data. We actually had documentation that supported that there was no internal -- indicated that they did not perform monitoring for thorium.

DR. ZIEMER: LaVon, were labs like General Atomic, even though they are contractors to what was then the AEC, were they required to be licensed by the AEC --

MR. RUTHERFORD: They were licensed --

DR. ZIEMER: -- or by the State of California?

MR. RUTHERFORD: They were initially licensed by the AEC and then later by the State of California.

DR. ZIEMER: And do -- do we have any records from either agency on -- on inspection reports or were tho-- are those part of the record?

MR. RUTHERFORD: We have not -- we had not recovered any. Now that doesn't mean that -- that those may not -- or may potentially exist at, you know, some new -- at the NRC or some other facility that we've not been able to -- you know, not been able to recover at this time.

DR. ZIEMER: If -- I think they also had a reactor there.

MR. RUTHERFORD: Yes, they had a number of reactors.

DR. ZIEMER: Which would probably be licensed even separately --

MR. RUTHERFORD: Uh-huh.
DR. ZIEMER: -- from the rest of the facility. I'm just wondering -- a facility like that would have been subject to at least annual inspection by AEC and later by the State of California, or both. It just occurs to me that inspection reports of that type might lead to some valuable information about the radiological conditions in the facility. I'm just wondering if -- if those haven't been looked at, whether they should have or could be looked at. They certainly would be somewhere in the records. But as a matter of course -- and this sort of just occurred to me -- as a matter of course, we -- we don't look at those kind of records --
MR. RUTHERFORD: Well, we do, you know, we actually --
DR. ZIEMER: We do as a matter of --
MR. RUTHERFORD: Yeah, if -- a number -- I mean a lot of the data -- you know, if -- if we have -- if the data is available to us, we will definitely look at that data. I mean, you know, we try to look at all documents that -- that potentially will have information to

support dose reconstruction. However, a lot of the information we haven't been able to uncover, you know, and -- and some information, you know, we -- we are -- started to do more data captures with the Nuclear Regulatory Commission and -- and other organizations to try to get more information. However, at this time we have been unable to come up with enough information to do dose reconstruction at General Atomics.

DR. MELIUS: Yeah, but -- but --

DR. ZIEMER: Okay, Jim or Mark, go ahead.

DR. MELIUS: Go ahead, Mark.

MR. GRIFFON: I'm just -- I mean I'm just a little confused on the -- and -- and it might be a question of -- of the form, but I -- in the -- in the document here, it's the Tech Basis Document for the site, it talks about 400 boxes containing records of radiological activities at General Atomics exist; 50 boxes were examined and copies of records considered germane to EEOICPA were made. So you did a sampling effort of these 400 or -- or --

MR. RUTHERFORD: No, we looked through those documents and we determined that there was no

thorium monitoring --

MR. GRIFFON: Okay.

MR. RUTHERFORD: -- that's why --

MR. GRIFFON: So you did look through all 400 and --

MR. RUTHERFORD: Yeah, but what I indicated was that there's -- you know -- I mean we go through all the documents that we have available. Now there may be -- I think in any case -- in any case, it's not a -- you know, an exhaustive process, meaning that there are other places where data may exist that we've missed and we may at some point uncover that data. So at this time we haven't uncovered data, and we felt it appropriate to move forward with this 83.14.

MR. PRESLEY: LaVon --

DR. ZIEMER: Robert, and then Jim.

MR. PRESLEY: -- did I understand you to say that there's -- you also found a listing that -- where there was work at the Test Site from General Atomics?

MR. RUTHERFORD: I don't know that I said that.

MR. PRESLEY: No, that's what I was wondering. I -- I misunderstood you, then.

MR. RUTHERFORD: No.
MR. PRESLEY: Okay.
DR. ZIEMER: Jim?
DR. LOCKEY: Paul, you had asked the question -- did you look at AEC in California, you did look for any records there?
MR. RUTHERFORD: Yeah, I -- I can't -- I don't -- I don't remember whether we actually called AEC, or called California, the State, to get records or not. I'd have to go back and actually check with our data capture people and see if they actually did contact them, so I can't -- I can't really answer that one.
DR. ZIEMER: Gen Roessler?
DR. ROESSLER: I think we're probably all going in the same direction, but it seems like it's a huge leap to go from one claimant to then including so many different facilities, and by different, it's been -- you know, across a wide range of activities. What I'm thinking of is as you recommend classes for an SEC, you actually recommend them, that we keep in mind the fairness and consistency of the whole program; that the decisions that are made here will then need to apply in the future. And

we've talked about this I think a lot and I think that's one of the questions we're asking.

MR. RUTHERFORD: I understand.

DR. ZIEMER: Just another comment, because the LINAC had bothered me a little bit because I know that even in typical activation experiments the targets usually are awfully small, mass-wise. And I can't imagine large amounts of thorium being in the LINAC facility, but -- but we don't have any way of knowing one way or another, I guess.

MR. RUTHERFORD: And -- and the other -- well -- well, I mean -- you don't have en-- you don't have the information available to know, and I don't know that it's going to change -- I mean if we separate it out, we've got to have a good basis for separating it out, so --

DR. ZIEMER: Well, yeah, but that's sort of what I'm getting at, and I think Gen is getting at. I mean does one size fit all here or does it make a difference whether you were in the analytical lab or in the -- in the reactor facility or the hot cell facility or the LINAC? These are all -- I mean in typical installations these are all very different

kinds of facilities.

Other comments -- or questions? Larry, you have a comment?

MR. ELLIOTT: Take due note of your comment there, Dr. Ziemer, but at each one of these individual buildings on this covered facility, we tie it to thorium, I believe. Right, LaVon? So you know --

DR. ZIEMER: Yeah, I -- I understood that, but -- that's why I was saying, for example, it would seem to me -- and this is more intuitive. I have no way of knowing. But for example, I -- I have a hard time imagining large masses of thorium in a LINAC where you typically are taking a little target and activating it for some kind of analytical procedure or something. Or -- or in the analytical lab where you're doing -- where you're usually trying to count low levels of things, it -- it's hard to imagine very big source terms in some of those buildings, as opposed to a hot cell where you expect to be handling large amounts, or even in the reactor itself where they're testing fuel elements. In -- in the fusion building if they're -- I don't know why you would have

thorium in a fusion building. I -- you would have tritium there, but why would you have thorium? So it's -- it's those kinds of questions that pop into my mind that say does one size fit all here, and may-- maybe -- maybe the data are inadequate to -- to answer the question and that's why you're forced into sort of saying we sort of have to assume thorium everywhere. But it seems, intuitively, like a stretch. That's all I --

MR. RUTHERFORD: Yeah, and -- and you made the point. I mean the process requires us pretty much if we're going to say it's -- it's not -- we're not included it, we're going to have to defend why we're not. It's a...

MR. ELLIOTT: Yeah, I would -- no argument here with you, Dr. Ziemer. I would just point out that the -- you know, when we talk about what happened, like in the science laboratories, we go so far here as to say that the operations included the grinding of thorium, which you wouldn't typically, you know, think of intuitively in a laboratory situation.

So you know, I -- I also would make -- want to make sure that the record speaks to this, and

this is timeliness. You know --

DR. ZIEMER: Yeah, (unintelligible) understand, yeah.

MR. ELLIOTT: -- this is one of these sites where we've been struggling with trying to reconstruct dose --

DR. ZIEMER: Right.

MR. ELLIOTT: -- and we've come forward with an 83.14 situation. I don't know if LaVon's been as clear as I would like for him to be in explaining that we have looked at all sources of records and data that we could possibly find in a timely fashion, and we've just reached our -- the end of that rope and we -- now we -- we have been to NRC. We have not perhaps been to the State, but I know this one was discussed as far as NRC data pertinent to this site, so...

DR. ZIEMER: Now this -- this site, though, is more of a -- well, it's a laboratory. If -- for example, I would expect grinding in a laboratory to be -- it wouldn't be like production-level grinding like you -- you know, it's not a Bethlehem Steel or something like that where you're grinding huge masses. It might be somebody at a mortar and pestle or

something, you know. So issues of scale come into play also in some of these kinds of facilities. But there again, it would seem to me, if it hadn't already occurred, if one had the annual inspections of a regulatory body, you'd get a pretty good idea of the radiological condition in -- in some of these, 'cause this is a pretty broad variety of -- this is not a facility doing one thing. There's a lot of different things going on here.

Jim, you have an additional question?

DR. MELIUS: Yeah. Yeah, I -- I guess what my -- my question is -- I'm presuming that ORAU did the work on this?

MR. RUTHERFORD: Yes.

DR. MELIUS: Okay. Would it be possible to check with the technical staff at ORAU who headed this to -- to get a little better idea of how thorough their, you know, attempt was to get additional information, and particularly if they had, you know, looked for or sought out either the State or the NRC records and what was the, you know, result of that -- those inquiries?

MR. RUTHERFORD: Yes, we can -- we can --
DR. MELIUS: I mean I think that's something that might be done and then we could, you know, postpone our consideration of this until tomorrow or the next day.
DR. ZIEMER: That might be a possibility. Let me also ask, do we -- do we have other claims from this site where we've not been successful in reconstructing dose, or just the one, or are there some claims that have been successfully reconstructed for this site?
MR. ELLIOTT: To date, I show 111 claims have been referred to us for dose reconstruction from DOL. We have completed 18, 11 of which were greater than -- were compensable, seven were non-compensable. We have 68 pended. I can't speak about those 18. They may have had time at someplace else, you know, other data, I --
DR. ZIEMER: But the compensable ones then were compensable without even considering the thorium --
MR. ELLIOTT: Yes, must --
DR. ZIEMER: -- I presume.
MR. ELLIOTT: -- have been, yeah.

DR. ZIEMER: Yeah.
MR. ELLIOTT: And those seven may come back to us once this class is dealt with.
DR. ZIEMER: Okay, Board members -- another comment, Jim?
DR. MELIUS: No, I'm sorry.
DR. ZIEMER: What is your pleasure on -- on this? We can ask for additional information, if you wish. We can make a motion, or we can -- we can delay action. What would you --
DR. LOCKEY: I move we table until we get the additional information.
DR. ZIEMER: Motion to table. That's got a caveat with it that we get some additional information. Be -- be specific, what --
DR. LOCKEY: NRC and California --
DR. ZIEMER: -- information would you like to see?
DR. LOCKEY: NRC and California. I'd like to know whether they were looked at.
DR. ZIEMER: Okay.
MR. PRESLEY: I'll second.
DR. ZIEMER: And seconded. This is a motion to table then. It's not debatable. I don't know if motions to table can have -- well, the

caveat is that that will bring it off the table if the information is available.

DR. LOCKEY: That's correct.

DR. ZIEMER: All in favor, aye? Or let me call for a show of hands -- one, two, three, four, five, six, seven, eight -- the ayes have it. The motion -- motion to table carries and we'll request that -- LaVon, that if possible you try to get that information. Whether or not that will help us, we don't know.

MR. RUTHERFORD: Okay.

DR. ZIEMER: That might -- it may be helpful to find out, one way or the other, if such information exists and, if so, what were the outcomes.

Any other comments on this petition?

(No responses)

STATUS OF UPCOMING SEC PETITIONS
MR. LAVON RUTHERFORD, NIOSH/OCAS

Okay. Now we have a whole laundry list of sort of informational items and -- I guess this is the LaVon Rutherford day.

MR. RUTHERFORD: Yeah, it is.

DR. ZIEMER: LaVon, status of upcoming petitions, I guess maybe you'll just go down the list and give us an update on various ones

here?

DR. WADE: Again, I think the importance of this agenda item we've just sort of experienced, that you've come -- petitions have come to you for the first time and you've said well, we want this and we want that. The purpose here is to give you a preview of coming attractions so maybe you can start to request the types of information you'd like to see when these positions -- petitions are brought to you.

MR. RUTHERFORD: All right. As Dr. Ziemer had mentioned, I'm going to give you a status of upcoming SEC petitions. The intention or purpose is to provide the Advisory Board an update to what SEC petition evaluations we have coming down that are going to be completed here in the near future, and our hope is that this information will support the -- help prepare the Advisory Board for future working groups and future Board meetings.

To date we've received -- actually as of December 31st -- or December 1st we'd received 79 SEC petitions. Actually we picked up two additional last week, after this presentation

was prepared, so we actually have now 81 SEC petitions. We have 12 SEC petitions that are in the qualification process. They have not been qualified to date. We have 30 SEC petitions that have qualified and that are in various phases, either -- either the evaluation report's being prepared; the evaluation report's complete, presented to the Board and waiting for Board determination; or they've completed all the way through HHS. And then we've had 31 SEC petitions that did not qualify.

You'll note that there were six petitions that were actually received prior to the rule becoming final. Those petitioners were given the opportunity to -- we sent them a letter after the rule became final and -- outlining the criteria in the rule and offering them the chance to petition again.

Currently we have a number of petitions that are in the evaluation process. The Los Alamos National Lab, we anticipate completing that evaluation report in January of 2007. That is an 83.13 petition.

Bethlehem Steel, we are in the evaluation

process and plan completion in February, 2007. Hanford is May of 2007; Sandia National Lab Livermore is April of 2007; and then Dow Chemical is an 83.14 and at this time we -- we had hoped to have Dow Chemical complete for this Board meeting in December. However, we were looking at some more resources -- data -- potential data resources and we were unable to get that complete. We anticipate completing that report in January and presenting at the February Board meeting.

In addition we've completed the evaluation of the Feed Materials Production Center. The evaluation report was completed, submitted to the Board and to the -- and to the petitioners. We plan to present that evaluation at the February, 2007 Advisory Board meeting.

We have some sites that we are currently working on 83.14s. W. R. Grace, right now we have approved an initial proposed class and professional judgment from May 1 of '58 to December 31, 1970. We're looking at existing claims to determine a representative case; and once we've found that representative case we will move forward through the 83.14 process

with that individual. We anticipate completing the process, the evaluation report being presented to the Board in January of 2007.
We have 11 sites that we've currently identified that -- that there's a potential that these -- that we will move down the 83.14 process. Right now we have not -- we do not have enough information at this time to -- to complete dose reconstruction for these sites and so right now we anticipate we will move down the 83.14 process with these sites.
These 11 sites -- our contractor, ORAU, is currently drafting initial class proposals and professional judgments for NIOSH review and approval. And once we've -- once we've reviewed them, approved them, then we will start moving down the 83.14 process with those.
We also anticipate that there will be additional sites that will be identified, either through our -- our contr-- either through review with our contractor with ORAU or our Battelle contractor.
And that's it. Questions?
DR. ZIEMER: Thank you. Let's open this for questions, questions on schedule, on

facilities, any related issues.

DR. MELIUS: Yeah --

DR. ZIEMER: Yeah, Jim.

DR. MELIUS: Sorry, Paul. Believe in the past you've -- or Larry or Jim Neton has -- have referred to this ORAU contract effort to identify sites where dose reconstructions were likely not to be completed, and believe the last time I checked on that it was -- that report was under review. Is that report now available? I heard you just refer to it. And could you also explain to me the -- what the Battelle re-- effort is and what the Ba-- Battelle report is or what Battelle is identifying?

MR. RUTHERFORD: I don't -- I don't remember saying that there's a report that had been developed by ORAU or Battelle. I think that sites are being identified as we move through the process, that -- that we've determined that dose reconstructions aren't feasible, so --

DR. MELIUS: The "you" I was referring to was NIOSH, and --

MR. RUTHERFORD: Okay.

DR. ZIEMER: Larry, you have an additional

comment on that?

MR. ELLIOTT: Well, my comment's the same as Bomber's. We have no report from ORAU. There was purportedly a report being generated. The report never surfaced in a format that was approved. We are pursuing all available avenues on 83.14s as we're doing dose reconstructions, both through ORAU, our own OCAS health physicists as they work on dose reconstructions, and the Battelle contract. The Battelle contract -- this is on our web site so you can see it if you go there, but -- was a contract for a one-year period to look at over 1,400 claims across what, 250-some sites, so there's a large number of claims but a small number per site. And these situations had existed in our -- our claim population as we worked on more -- sites that had more claims, like Los Alamos, Hanford, Savannah River, Y-12, those sites. As Battelle came to closure on the -- on the contract period, it had a one-year contract period to perform its duties, we took a look at where things stood in September of this year, knowing that the contract was due to expire October 11th of this year. So about

a month before, we took stock of where things stood with Battelle. We found that about half the work had been performed for about half the money expended. In other words, we gave them a budget and they only expended half of that budget and they performed about half of our expectations in the scope of work, so we had a large amount of money left on the table. We had a lot of work left to be done. We -- we partitioned that work and provided specific expectations to Battelle -- you can see this in the contract mod that is on our web site -- and took away some of the sites from them, returned them either to our own health physicists or to the ORAU health physicist team. So the -- there's clear expectations on what Battelle is to do till the current contract period that they're working under expires in May of 2007. As they move forward we anticipate that a number of sites that Battelle's been working on will become 83.14s. Dow is one of the first ones that's coming out of that process, so we have seen from Battelle two generic Technical Basis Documents that speak to sites that were processing uranium in a consistent way across

sites, and another Technical Basis Document that -- my age, I'm just now -- I've lost my train of thought on what that was presenting to us, but at any rate, it was another general Technical Basis Document that treated a group of sites that processed radioactive material in the same manner.

We're starting to see and have seen a number of dose reconstructions come from those two site Technical Basis Documents, but there's a lot of other sites that are not going to be handled or treated -- the claims won't be handled under those documents.

DR. MELIUS: Can I -- can I pursue that?

MR. ELLIOTT: Yeah.

DR. MELIUS: Larry, don't sit down 'cause -- more questions. Then if I understand it correctly, we would identify sort of through the 83.14 process or -- or self-identifying through -- through NIOSH potential SECs by cases which -- where the dose reconstructions could not be done as -- as you're doing dose re-- actual dose reconstructions. That would be --

MR. ELLIOTT: Yes.

DR. MELIUS: -- one methodology.
MR. ELLIOTT: Yes.
DR. MELIUS: The second methodology, which I think I just heard you describe which I -- I don't recall before, but -- I mean it does make sense, is as you're doing a Technical Basis Document that described a -- a site, part of a site or -- or a process that might be -- or a procedure that might be used across several different sites, that you would identify that -- that dose reconstructions could be not done for that --
MR. ELLIOTT: Could be done for that.
DR. MELIUS: Yeah.
MR. ELLIOTT: A Technical Basis Document that, on a general basis, speaks to what happened at a group of sites --
DR. MELIUS: Right.
MR. ELLIOTT: -- who were performing similar work.
DR. MELIUS: And -- and -- and would speak to whether or not dose reconstructions might be feasible at those. I mean it -- I guess could cut either way. Correct? I mean...
MR. ELLIOTT: Well, some -- these -- these

sites that Battelle was given either fit into one of these two categories that are going to be treated under these Technical Basis Documents, these two general Technical Basis Documents, or they're going to find their way into 83.14s.

DR. MELIUS: Okay.

MR. ELLIOTT: Okay? An 83.14 starts in our rule on dose reconstruction under Section 82.12, and you go to that section, you'll see we run into a situation on an individual dose reconstruction we can't reconstruct.

DR. MELIUS: Yeah.

MR. ELLIOTT: And that starts the whole 83.14 process.

DR. MELIUS: Okay. Then I'm going back to then what was the ORAU report that has never materialized, and I guess my question would be is that a report that -- that the methodology was flawed or was the performance of the contractor flawed in terms of identifying -- seems -- seems to me that what we were seeking there made sense. We were trying to find a -- a more general approach that might help to identify situations where dose reconstructions

would not be feasible to do with sufficient accuracy and that -- as part of that is -- and I'm -- we were never given the details of what ORAU was doing, or I don't recall what they were -- what -- what they were doing, but seemed to me it would -- might -- might have been a more efficient approach. Right now we're --

MR. ELLIOTT: Well, I don't --

DR. MELIUS: -- wrestling with this situation where we're sort of identifying these case by case, and it's problematic -- or we have the case with General Atomics, it's -- it becomes, you know, at least potentially problematic when we try to generalize from a single case to other cases at that -- or other situations at that -- that same facility. So I'm just trying to better understand why the original attempt with ORAU apparently failed.

MR. ELLIOTT: It failed because the thinking that went into their methods -- this is over two years ago, you know, when we had a large number of claims in our backlog, places that we had not reconstructed dose for.

DR. MELIUS: Uh-huh.

MR. ELLIOTT: Their methodological approach toward that was flawed from the start, in fact had in this purported proposed list in this -- this draft, situations where dose reconstructions had already been done, so on the -- on the face of it, it was flawed. We did not accept it as a work product and -- and we proceeded from that and divided out a number of sites that had not been given adequate attention or treatment up to that point in time and put those in place in front of Battelle and asked them to work on them while we were having ORAU concentrate their efforts on things that they had become competent and adept at.

DR. MELIUS: Yeah, I -- I'd just be careful about characterizing the fact that one can do dose reconstructions or have completed dose reconstructions as disqualifying an SEC because I think we've seen, you know, situations -- including today -- where you have completed dose reconstructions at a site and we're still saying it's an SEC. There are many --

MR. ELLIOTT: Well --

DR. MELIUS: -- feasible ways that it is actually feasible to do and straightforward,

so...

MR. ELLIOTT: There's a lot that goes into this, as you know.

DR. MELIUS: Yeah.

MR. ELLIOTT: And we're doing individual dose reconstructions. As we do them, we look at the site those originate from, and that has to be taken into consideration when you start talking about adding classes.

DR. WADE: All right, just to clarify -- excuse me -- so now the potential list of 83.14 sites is before the Board. I would expect that list would grow.

MR. ELLIOTT: The -- yeah.

DR. WADE: Possibly at each Board meeting you could bring that list --

MR. ELLIOTT: Yeah.

DR. WADE: -- to the Board and give them a heads-up as to what's coming.

MR. ELLIOTT: Yeah, I -- you know, the -- frankly, I get beat up whether I bring you a list or not, guys, you know? We talked about should we come forward with this list today and put LaVon on the mike or not with it, but -- and I said yes, let's put it on there, but it's

for information. No, we're not ready to defend the -- these particular sites on this list at this point in time. We're working on developing the professional judgment that goes to what can be reconstructed and what cannot be reconstructed. That leads into an evaluation report. Okay? There are more 83.14s on the horizon than you see on this list, but we're not -- you know, I'm not confident we should have added them to the list at this point in time. I'm confident that the ones you're seeing today, at the end of the trail we're going to say these are 83.14s; here's your evaluation report, here's your -- here's where we're at.

DR. WADE: But I think it serves the Board, as soon as you are confident, that you bring that information to the Board.

DR. ZIEMER: Other comments or questions?

(No responses)

Let -- let me ask a question, and I don't know, NIOSH folks, if you'll want to answer this or not, but is the Congressionally-mandated time clock -- is the Congressionally-mandated time clock on SEC petitions causing NIOSH problems?

And I see this many petitions -- potential petitions coming forward and the workload they might represent, and I don't -- don't answer it if you don't feel comfortable going on the record. It just seems to me that -- that this could really stretch the agency's resources to address vast numbers of these SECs in a timely fashion.

MR. ELLIOTT: We're doing the best we can, and we're trying to bring forward --

DR. ZIEMER: That's an answer. Probably you should stop right there -- no. No, but -- but actually, I -- I do worry about this some.

MR. ELLIOTT: Well, I mean I lose sleep at night every night, too, worrying about this and other things.

DR. ZIEMER: Yeah, because in part, in a -- it sort of gets to -- I -- I mean we faced it sort of group-wise, all of us, on the Mallinckrodt situation, and we've got to be timely. But in being timely, sometimes there's information you can't get to, like we've talked about here today -- well, what about this -- these inspections. Well, maybe it's more than can be done in the time available. That's one of the

problems that I see. I just --

MR. ELLIOTT: We use that, but we also look at what we do get from the NRC. In many -- in some instances it's not -- it doesn't add to the value of what we've already got. But yes, we are doing the best that we can. We're trying to bring forward as many of these as fast as we can. I think you're getting a better insight into the process by us sharing with you where we're at with this list. You know, you probably haven't heard us talk much about a professional judgment document. This is something that gets created before the -- you know, the evaluation report. You've never seen one. We don't have to share one with you, but if you'd like to see one we can certainly get that. The most important thing I think is the evaluation report because that spells out -- you know, we hope specifically spells out what we cannot do and hopefully what we can do, so we're doing the best we can.

DR. WADE: You've identified the correct trade-off, Paul, between timeliness and completeness. You know, we understand and respect the wisdom of Congress and we work within it, but there is

that trade-off. I mean as -- as the time periods are limited, then you can only do so much during those time periods.

DR. MELIUS: Well, whether or not Larry is -- and his staff is stretched or whatever, I think the Board is, certainly based on this list, and I think --

DR. ZIEMER: Except we don't have the time limitation on us, but it does stretch. I mean the backlog starts to build up there, too, and there is -- if not a mandated time, there certainly is pressure from constituents for their petitions to be dealt with, so it -- it's a -- it's a shared problem, I think.

DR. WADE: Resources on all levels enter into this, be it time or money. And you know, we'll talk about this through the course of the meeting.

MR. ELLIOTT: This is the reason why I felt it best to have LaVon present the list to you so that you can see what's coming down the pike. You can already pinpoint now what you can foresee coming to you in January -- or in February, a number of these in February, and I would submit that perhaps at the May meeting

you're going to see even a larger number coming at you. That's my hope. That's our goal.

DR. ZIEMER: Now don't try to scare us, Larry.

DR. MELIUS: Well --

DR. ZIEMER: Wanda Munn.

DR. MELIUS: I have some further comments after -- go -- go ahead, Wanda.

MS. MUNN: He's already scared me, and I believe Jim has adequately characterized a major concern we need to all have, as Lew has referenced. This is not just a daunting task for NIOSH and ORAU. This is a daunting task for this Board, trying to maintain some semblance of continuity without closing out the processes that we have undertaken. Every -- every time we do something that asks for further extended effort from any of the agencies involved, we're also extending our own effort. And that's -- if we are not very careful, I think we'll all be overwhelmed by that. That's one of the things hopefully we can remain in the forefront of our thinking when we go forward with these things.

DR. ZIEMER: Thank you. Jim, additional comment?

DR. MELIUS: Yeah, couple of things I think we ought to think about and I think we need to take action on. One -- one is I notice that for some of these petitions and evaluation reports we're going to see, either at our next meeting or very shortly here, we -- I don't believe we've had -- I think -- I believe we have for several of them site profiles. I don't believe that we have workgroups that have really addressed the site pro-- excuse me, the site profile reviews. We have them and I don't know if we have workgroups set up for some of these, and that -- certainly having a active group that's looking at the site profile can help to facilitate the review, particularly where it involves a large -- significant portion of the site or large numbers of workers and so forth as in the Rocky Flats site and so forth. So I think that's something we need to consider in terms of our scheduling and so forth.

The -- the second thing I think we need to -- to do -- consider is should we form another subcommittee that would address the 83.14 petitions. Those are generally small, sort of

self-contained, that -- that I think having a workgroup that would review those -- prepare a recommendation that would then come back to the report (sic) if the recommendation -- you know, recommendation would include a letter that -- you know, to the Secretary that we would normally generate so that it might provide a little bit more efficiency in dealing with it where there are questions like we had questions on General Atomics that would allow those to be clarified before the -- the full Board considers it and so forth. And I think it would facilitate the process to address at least the 83.14, and my suspicion is that as this process moves along that Larry's going to -- staff is going to be identifying a significant number of those petitions and I -- those are the ones just for us to go through and spend the time ta-- at the Board meetings take a considerable portion of the Board meeting. If we had those 11 sites at a Board meeting, I mean there's the Board meeting right there. I mean the ones that are potentially identified now. And so I -- I think we need to think about how to process those in a more

efficient fashion.

DR. ZIEMER: Good suggestion, and when we do our Board working session later this week we can talk about specific -- I think you're suggesting actually a workgroup --

DR. MELIUS: A workgroup or a subcommittee --

DR. ZIEMER: -- or a subcommittee.

DR. MELIUS: -- I didn't know whether it should be a standing group or --

DR. ZIEMER: Yeah, it actually could be standing if you're going to deal with all upcoming --

DR. MELIUS: Yeah.

DR. WADE: I would suggest we --

DR. ZIEMER: -- 83.14, but --

DR. WADE: It would start with a workgroup and possibly morph into a subcommittee.

DR. MELIUS: Yeah.

DR. WADE: There's paperwork that would have to be done, but I think it's an excellent (unintelligible) --

DR. ZIEMER: And I think you're also suggesting perhaps specific workgroups for particular petitions, particularly if they're com-- more complex, like perhaps the General Atomics is a

little more complex. Might be worth having a group --

DR. MELIUS: A group look at that --

DR. ZIEMER: -- look at that in advance of our meeting and then come prepared to make the recommendation.

DR. MELIUS: Yeah, like Fernald, I don't believe we have a workgroup dealing with that. We've had a site profile review for a while. LANL, do we have a --

MR. PRESLEY: I think we have (unintelligible) --

DR. MELIUS: -- (unintelligible) LANL, either.

DR. ZIEMER: A number of these we have site profile workgroups, but not --

DR. MELIUS: Not for LANL or Fernald, I don't believe.

DR. ZIEMER: Fernald we don't, I'm not --

DR. MELIUS: LA-- LANL we don't, Ha-- Hanford we --

DR. ZIEMER: I have the list with me somewhere, we'll -- but we'll -- we'll look at that in our working session -- good suggestion.

Wanda, you have an additional comment?

MS. MUNN: The possibility of a subcommittee to

look at these less extensive potential SECs is one which requires a great deal of thought, I think. Having contemplated how one might expedite that for some little time, one of the issues that rises I think is how amenable the Board is to the possibility of accepting a subcommittee's recommendations without continuing to do the kind of vetting that we've done as a whole Board in the past. And I personally have been unable to get past that barrier. Perhaps that's an issue that we should discuss at great length here while we are meeting as a full Board, because the probability of accepting a subcommittee's recommendation without what we're accustomed to doing might be problematical for us.

DR. ZIEMER: But perhaps a subcommittee or a workgroup could, in advance, ask some of the kind of questions that have arisen here and make sure that we're at least at a level of comfort on what information is available for us to make a decision. That doesn't mean that the Board can't ask for additional things or have additional comments and so on, but it does give a -- an early look at some of these before we

are in full Board session and see who -- Robert, and then Jim.

MR. PRESLEY: The Board could go ahead and outline which SEC petitions that we did want to look at, or site profiles that we did want to look at, you know, and set a group up. But I agree with Wanda. You know, it's -- it's just like today, I thought we'd breeze through General Atomics until you get there and then you see all this stuff, so you really don't know which ones that are going to have the -- the glitches with and which ones we're not. Now we -- we -- I think we could come up with a list of the bigger sites that we'd probably want to -- to do that with. I think we ought to address that.

DR. ZIEMER: Jim?

DR. MELIUS: Yeah, I've got a little contrary view based on our own -- actually -- at least my observations of the Board. I mean I -- if you look at all the activity that's done in a workgroup on the dose reconstruction reviews, on some of the other SEC and site profile reviews, if you look at all the time that's put into that, think of if that were -- all had to

be replicated in the Board meeting, and we don't do that. And I think we do accept what's -- a large amount of the work that comes in from -- from our workgroups and it tends to then focus us on what are the more important aspects that really need to be discussed and evaluated as a full Board, and I see no reason why we couldn't, you know, evolve the same way with the SEC -- particularly the 83.14s where, you know, by definition we know what the NIOSH recommendation's going to be so it's not like, you know, we have to guess at that. And then the question is just, you know, the issue of the identifica-- the identification of any issues and -- and, you know, is the justification for that -- that adequate and preparing a communication with it and I -- I don't think it needs to be a, you know, perfunctory review. I think it -- but it certainly is something that, you know, rel-- relatively straightforward and I -- I think would be much more -- a fairly -- should be a fairly efficient process.

DR. ZIEMER: The other thing is that we do have a -- one of our tasks for our contractor is

site prof-- or is SEC petition support.

DR. MELIUS: Yeah.

DR. ZIEMER: And on those, we -- we would have workgroups and, for example, we do have a -- a workgroup on the Chapman Valve SEC, we have a workgroup on Rocky Flats, actually, which is site profile and SEC, but -- so we have that -- yeah, on both -- we have that -- that model already --

DR. MELIUS: Ye-- yeah.

DR. ZIEMER: -- for certain ones and it would be a matter of extending the model.

DR. MELIUS: If we were doing Rocky Flats work as a full Board, I mean we wouldn't get to anything else for another two years, the way the meetings are going.

MS. MUNN: Jim clearly sees this process as moving more smoothly than I.

DR. MELIUS: Okay.

DR. WADE: And as always, the truth is probably somewhere between, so...

DR. ZIEMER: Okay. Other comments? Thank you, that's -- now when we have our working session later in the week, why we can put some -- some feet on these suggestions.

DR. WADE: Excellent suggestion.

DR. MELIUS: And could I -- I would just like to thank Larry for presenting this. I didn't mean to try to kill the messenger. I was just trying to find out what happened to that ORAU report we hadn't heard about for a while.

DR. ZIEMER: Thank you.

DR. WADE: Yeah, I, too, applaud NIOSH's efforts for coming forward, so thank you.

SUBCOMMITTEE REPORT
MR. MARK GRIFFON, CHAIR

DR. ZIEMER: Now we have a subcommittee that met earlier today and Mark Griffon -- and this is now officially the Subcommittee on Dose Reconstructions, has been rechartered, and that group met this morning and Mark, you have a report and recommendation?

MR. GRIFFON: Have a very brief report. I don't want to duplicate the work we did in the subcommittee, so this'll be very brief.

DR. MELIUS: I have lots of questions, so...

MR. GRIFFON: This morning we -- we worked on -- primarily on this seventh set of cases and selection of a seventh set of cases and -- and what we made a preliminary decision, at least amongst the subcommittee, was to -- we wanted

to sample additional cases and -- and pull -- pull cases, but we wanted to create some sort of screening device that NIOSH can pull additional information for us about these cases and -- and it's -- this is information that's not readily available in the database, parameters that you can't pull off the -- about the cases without actually opening up the full case and looking at the case and -- but nonetheless we feel like they're critical and -- - in -- in assuring that we get a good cross-section of the cases that we're looking to review in our overall audit. If you remember, early on we created this matrix of what we wanted to see at the end of the -- at the end of the audit, sort of what we wanted to cover. We wanted to cover various time periods, various begin work periods, various types of cancers, various sites at different levels depending on the total number of claims to some extent. So we had all these parameters we're -- - we're filling in all these boxes as we track the cases through.

Now we're coming to a point where we're -- we feel like we're -- we're finding so many of the

similar cases. If we pull them out randomly, based on our previous selection criteria, we're getting cases that basically -- well, OTIB-4 or OTIB-8 and 10, they rely on the exact same methodology that we've already reviewed and discussed at length on the subcommittees and in the previous write-ups, the first three sets of cases that we -- we've written reports on. So we thought we'd be better -- it would better serve this audit process if we could find -- first select -- and that's why we've come with 32 cases that we selected. The notion is out of the 32, after NIOSH -- if we approve these 32 as a full Board, NIOSH will take the 32 back, look through each of the 32 cases and identify parameters that we came up with.

The ones we came up with which we thought would help steer -- or help allow us to make a better decision on whether we want to review the case or not are the following:

Whether the case has neutron dosimetry pre- or post-1972, and that's an important cut-- cutoff to -- related to the type of -- of dosimeter used for neutron detection.

The work area, and this one's going to be -- as

we discussed on the subcommittee, this criteria -- you know, we -- we -- we could end up with a field that has a lot of information in it. It could be that a person was in one work area the whole time. It could be a multitude of work areas listed in this field, so we're not sure exactly what we're going to get back. This is kind of a trial approach. We think it's an important factor in terms of -- for instance, especially at some of the larger sites, we want to make sure we -- we -- we think we're getting a lot of -- of Savannah River Sites, for instance, but if they're all from one particular area at Savannah River, we may be missing -- you know, we're not getting a good cross-section of the types of cases that might exist at Savannah River. So we want to -- we want to try to get -- to -- to crack that nut. One attempt is to try to have NIOSH include the work area and let us see if we can better determine is this case worth looking at or have we looked at several of these types already, that sort of thing.

Third factor is job title, which again, they may have multiple job titles, but they say this

one is probably a little easier than work area. Fourth is the external dose methodology and the fifth is the internal dose methodology. And those last two, a lot of times they're going to include -- you know, for external they used TIB-whatever, a certain Technical Information Bulletin was used to establish the dose. It may be a combination of things. It may be that they used personal dosimetry and coworker model, parentheses, TIB-whatever. But we'll have at least a sense of -- and this -- this will help us at least in those cases where we -- we've seen TIB-4, which is a overarching methodology, used in a lot of cases. This will at least show us -- you know, sometimes in the matrix that we get for our initial selection, when it says full internal and external, it -- not that it's misleading, but it -- but it might -- some of that could include a site-wide model that's applied to all workers. And you know, you -- if you -- if you weren't familiar with the details of the process, you might think well, full internal/external, they must have all the bioassay for this individual and do a -- you know, a bioassay calculation

specific to that individual. That may not be the case for all -- for all those, so we want to get a -- an impression of what type of external method and internal method are being used.

Then once we get that back for the 32 cases, the notion is to -- and I think that Stu said that I think by January, maybe it was possible that we might get a product by the January phone call of the Board --

MR. HINNEFELD: I specifically didn't promise, but --

MR. GRIFFON: Yeah. No, I know, you didn't promise. You didn't prom-- anyway, the idea would be to then -- hopefully out of 32 we can get down to 20 that will be -- that we're still interested -- interested in at the end of the day.

So NIOSH would bring that back to the subcommittee, we'd go through that detailed information and then come back with a proposal for 20 as the seventh set. So it's a sort of two-step process here, but I think we're going to get to -- more useful type of reviews that we're -- that -- that the whole Board will

benefit from, so...

DR. ZIEMER: Okay, questions for Mark?

(No responses)

So we will see the list then --

MR. GRIFFON: Yeah, I --

DR. ZIEMER: -- on --

DR. WADE: You want me to read the list?

MR. GRIFFON: Well, I was going to say, we could -- we could go through the numbers that were selected -- does everybody have the-- these?

DR. ZIEMER: Do we need to take action on this list or are you -- are you waiting till they look at the parameters?

MR. GRIFFON: I -- I was going to -- well, I was going to say --

DR. ZIEMER: You'd like them to take action?

MR. GRIFFON: Yeah, I'd like them to take action on -- on us going forward with these parameters and --

DR. ZIEMER: Okay.

MR. GRIFFON: We can discuss the parameters first if you want and then...

DR. ZIEMER: Okay, let's open the floor for discussion, and Lew, if you'll go through the

list and I'm going to check on...

DR. MELIUS: Just in terms of the parameters --

DR. ZIEMER: Go ahead, Jim.

DR. MELIUS: -- I -- I would support those. I think they sound reasonable. I think the issue's more likely to come up that if after the 32 go in and NIOSH comes back, I think there may be some judgments on how to -- how to weight different things in terms of balancing those that'll get reviewed this -- this round, but I -- I don't think I'd want to question any of them until the -- we saw what -- saw what comes back 'cause I -- I think that would be the -- the thing. I -- I -- you know, I'd agree, we ought to at least preliminarily approve the 32, so -- if only to inform some of us who weren't part of the subcommittee as to what -- what you selected, but -- yeah.

MR. GRIFFON: We fully admit that this is a sort of draft list of additional parameters, and I -- I'm not -- I'm interested in work area. I'm not totally confident that -- that once I see what's delivered, it's going to be very hel-- you know, so -- so it may be that, you know, if -- if we get 32 cases here and 15

of them have, you know, eight -- eight or nine buildings listed or whatever, it may not be helpful in us determining, so we'll have to -- but we -- we decided it might -- at least the subcommittee decided that it might be a worthwhile draft proposal. Let's look at these 32, see how this setup works and we can always refine it as we go forward.

DR. WADE: Any other discussion? What I can do now is read you the 32 cases or refer you to them on your list.

In your tab under "Dose Reconstruction" you'll find a series of papers. They're really broken into two parts. I believe that the first one is full internal and external, as it said at the top of the middle. What I'm going to do is walk you through and identify 15 of those cases that the subcommittee has identified. Okay? The first one -- I'm going to read the last three num-- well, the last three numbers is 302, and then 306, 314, 322, 327. Next page, 335, 337, 351, 354. On to page three, 375, 393*. Page four, 455*. Page five, 480, 490. And page six, 509. Those are the first 15.

If you go to the next document in that sequence, up at the top you'll see random selections. And I'm going to read you 17 cases that have been identified there. The first on page one is 013. On page two, 017, 028. On page three, 054, 056 and 063. On page four, 076, 079, 081 and 099. On page five, 102, 104, 126. On page six, 132, 141, 154. On page seven, 166. And that should be 17 on that list for a grand total of 32.

DR. ZIEMER: Okay, everyone have the -- the items? Now what we want to do is approve these for the screening process that Mark described, and from that -- Mark, how will -- how will we reach the next 20?

MR. GRIFFON: Well, the -- the -- that -- that's the question. The -- I think NIOSH is going to bring that back to the subcommittee --

DR. ZIEMER: And then you'll (unintelligible).

MR. GRIFFON: -- and then we're going to look -- we're not sure exactly how these are going to be -- are going to fall out --

DR. ZIEMER: So --

MR. GRIFFON: -- so we're going to review them one by one and go through -- yeah.

DR. ZIEMER: Okay. So this comes as a -- as a recommendation from the subcommittee. It constitutes a motion. It does not require a second. Any discussion?

(No responses)

If not, we'll vote. All who favor sending these forward for the screening process, say aye?

(Affirmative responses)

Any opposed, say no?

(No responses)

Abstentions?

(No responses)

Motion carries. Thank you very much.

DR. WADE: And with an eye towards the future, SC&A has indicated that if the Board -- the subcommittee and then the Board could identify the seventh set of 20 by the June -- excuse me, by the February Board meeting, that would allow them to maintain continuity. We have an eighth and a ninth set also to address this year.

DR. ZIEMER: Mark, if I could ask a question, and then -- Jim, go ahead.

DR. MELIUS: I have a question and I -- I may have missed this in all the paper that we get.

Are we keeping any sort of a tally that would allow us to -- sort of a running tally of what cases we've selected and -- going through the process by some sort of cross-tabulation by site and by --

DR. ZIEMER: Yeah, they have that. Stu --

MR. GRIFFON: NIOSH is tracking that for us.

DR. MELIUS: I think it'd be useful for the other members of the Board to have --

DR. ZIEMER: We have it --

DR. MELIUS: -- that, also.

DR. ZIEMER: -- by site, by cancer, by POC --

MR. GRIFFON: Right.

DR. MELIUS: Yeah.

DR. ZIEMER: -- by number of work years, the regular sort parameters. I think these screening ones are ones which don't come out in the normal sort, that they have to go into the cases to --

MR. GRIFFON: Right.

DR. MELIUS: Right.

DR. ZIEMER: -- so they're a little more difficult to --

DR. MELIUS: Yeah, but it would be useful for the other Board members to have that and just -

-

DR. WADE: Stu, if we could ask that that be shared before the next Board meeting.

DR. MELIUS: Yeah, which would be fine in terms of timing.

DR. ZIEMER: Mark, are you in a position to give us a quick update on the status of the matrix for cases 61 through 80, which would be the fourth set, which are still in process but are -- are getting toward closure.

MR. GRIFFON: Yeah, yeah, a very quick update. We've -- we had a meeting on November -- was it in November?

MS. MUNN: Yeah, it was November -- toward the end of November.

MR. GRIFFON: Anyway, we had a -- a DR -- yeah, the 16th or 17th, somewhere in there I think -- had a meeting of the subcommittee and we discussed the fourth set of cases and we started the resolution process, the finding resolution process. At that time NIOSH provided their responses to SC&A's finding in matrix form. We went through most of those and we -- we have at least a preliminary resolution and -- and in some cases -- actually there's --

several of the -- of the -- I think it was two out of three of the best estimate cases NIOSH is actually redoing the dose reconstructions and they -- they were ones that were very close to the 50th percentile I think so there was -- so there's -- there's follow-up action such as that where -- where NIOSH is -- is actually redo-- or -- redoing a fairly extensive amount of work on -- but we did go through the whole first step of the resolution process. My sense is that I can update this matrix and probably -- I don't know how we've done this before, but I think we could probably be in a position to distribute it to the Board -- you know, an update on this -- and probably close to closure in February. I might be getting ahead of myself, Stu, but I -- I -- I think we might be in a position to close on this in February at the next Board meeting, so that's kind of a very brief status review on that. Am I -- am I accurate on that, John, or is Kathy or Hans on the -- on the line?

MS. BEHLING: This is Kathy Behling --

DR. MAURO: Yes, I believe we spent that day --

MS. BEHLING: -- yes --

DR. MAURO: -- it was a Friday, I remember --
MR. GRIFFON: Hold on, Ka--
DR. ZIEMER: Kathy, are you on the phone?
MS. BEHLING: Yes, I am.
DR. WADE: Could you speak --
MS. BEHLING: Can you hear me?
DR. ZIEMER: Did you hear Mark's comment?
MS. BEHLING: Yes, I did, and Mark is accurate with everything. The only thing that I would ask, and I assume that you implied this, is that when we continue on with the fourth set of the -- for the resolution process that we will have some response by NIOSH as to those open cases that we're asking them to review.
MR. GRIFFON: Right, right, so there -- there's definitely some actions that NIOSH is working on. At least two or three of the cases I know are -- are going to require a fair amount of work, so -- but I think -- I think we're still on course to probably close the fourth set out for the February meeting. That's -- that's my goal on this. And like I said, I think in the interim I've -- I've missed this homework assignment, but I -- I do have all the handwritten notes on the resolution from the

last meeting. I can update this matrix and circulate it so people are in the loop on -- on where we stand on the -- the review.

DR. ZIEMER: And then cases 81 through 100, which would be the fifth set, I believe that SC&A distributed that report within the past week.

DR. MAURO: Yes.

DR. ZIEMER: And so you should have gotten that, and from that the matrix will be developed for that as well.

MR. GRIFFON: Yeah. Yeah, and I think SC&A is well along -- might even have a draft matrix ready, but we'll -- that's in the pipeline, so -- yeah.

DR. ZIEMER: Good.

MS. BEHLING: Yes, I have -- this is Kathy Behling again, and I have developed a draft matrix and I have forwarded that to the -- the Chair of the working group, to Mark.

MR. GRIFFON: Right, okay. So we'll get -- we'll pull that into the next subcommittee meeting, too, as well.

DR. ZIEMER: Okay, thanks. Is there anything else for your subcommittee, Mark, that you need

to report on? Any questions for the subcommittee?

(Pause)

PUBLIC COMMENT

We do have a public comment period scheduled shortly. We will take a break just before that, but I do want to ask -- I want to make sure that the individuals who signed up are here. Dan McKeel, I saw Dan earlier today -- yes, hi, Dan. And John Ramspott -- is John here -- thank you. And George Luber? Is it Uber or Luber? Luber, good, okay.

UNIDENTIFIED: L-u-b-e-r.

DR. ZIEMER: Okay.

DR. WADE: L-u.

DR. ZIEMER: L-u-b, Luber. And Larry Burgan? Okay. I want to ask the four of you -- our public comment period is scheduled for 5:00, but does anyone object if we start it at 4:30?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: It's okay?

UNIDENTIFIED: (Off microphone) I'm going to withdraw (unintelligible).

DR. ZIEMER: Okay. Does the other three

speakers -- anyone object to going earlier?

DR. WADE: Okay.

DR. ZIEMER: Okay, then we will -- we will recess for 15 minutes and then have the public comment period at 4:30.

DR. WADE: If I might make a very quick announcement, you'll notice that the proceedings are being taped by the "Village Image News" and they are being most discreet in doing that, and just wanted to identify that that was ongoing.

DR. ZIEMER: Thank you very much, so we'll recess for 15 minutes.

(Whereupon, a recess was taken from 4:17 p.m. to 4:35 p.m.)

DR. ZIEMER: This is our public comment session for today, December 11th. Our first speaker will be Dan McKeel. Dr. McKeel has been before this Board on several other occasions. Welcome back, Dan.

DR. MCKEEL: Good afternoon to the Board, Dr. Ziemer. So as you all know, I'm a retired physician and -- and now am the lead petitioner for the Dow Madison site SEC 00079 now. I'm -- I also represent the Southern Illinois Nuclear

Workers or SINW. You should know, and we'll talk more about this tomorrow, that we're also vigorously advocating that NIOSH recommend an immediate Section 83.14 for General Steel Industries located in Granite City, Illinois, and my colleague John Ramspott will have more to say about the GSI site.

What I want to address with you now are the timeliness issue again and SEC process issues as they apply primarily to the Dow site. I will also address the Battelle task order 16 and the GSI SEC issues in more detail tomorrow.

My overarching general concerns are that after six years of EEOICPA, only two of 253 total claimants -- and that would include 226 cases, 208 of which are unique; 80 have been referred to NIOSH at Dow -- have completed dose reconstructions, and only two have been paid. At General Steel Industries, only four of 744 total claims, which represent 512 cases, 452 unique individuals, and 192 cases referred to NIOSH, have completed dose reconstructions and only one has been paid. So -- so out of the total claims at both sites, only six people have dose reconstructions, and we think that

the four at the General Steel site actually may have worked for Granite City Steel and not truly at the GSI site.

This rate is among the lowest in the entire program. Neither site has a completed site profile, any radiation dosimetry, a TBD or a TIB that have been completed that fully address the radiation source terms. Both have acknowledged long residual radioactivity contamination periods. The Dow site has never been remediated for beryllium, which was widely used there as an alloy constituent with magnesium, aluminum and thorium.

So let's talk a little bit about timeliness and the Dow situation. As a background, we have supplied NIOSH with meeting PowerPoints, affidavit and outreach meeting video footage, and court reporter-generated verbatim transcripts of three meetings held with Dow Madison workers. We have supplied NIOSH with 37 affidavits that are relevant to SEC 00079. We informed them that SINW has both Privacy Act and medical -- HIPAA-compliant medical releases that have been signed and notarized from all of the affiants. Yet to our chagrin, we recently

learned that this information had not been placed on the shared O drive to be viewed by the Board, SC&A or others with a need to know, particularly for the Dow SEC, or to see documentation that may also be crucial to resolving the Rocky Flats SEC that was discussed again earlier today.

The same was true of all of the voluminous material that Mr. Ramspott has supplied to the OCAS office regarding General Steel Industries, an issue which John may want to address.

I mention to the Board again my concern that SEC petitioners are not treated equitably because they have no direct access to information on the O drive, even with ample justification in the form of signed and notarized Privacy Act and HIPAA releases. I believe the Board and NIOSH should formulate a policy to address the unfair current policy of excluding petitioners with web access to the O drive unclassified documents. They should also formulate a formal policy and procedures for providing access to all for classified documents that relate to SEC petitions.

Efforts to obtain crucial documents from DOE starting last February the 9th were obstructed until recently when Elizabeth White re-- stepped in. On Saturday, last Saturday, her office finally provided some of the Dow Atomic Energy Commission Rocky Flats documentation we needed to establish a direct link between the Madison site and the Rocky Flats AEC contract work related to metallurgic processing of thorium and perhaps beryllium.

SINW was first notified of an 83.14 SEC for Dow by OCAS on September the 5th, 2006. Litmus case number one person had submitted the -- the candidate as a litmus case had submitted Parts B and D claims, D having now moved over to E, in August of 2001. His Part E claim was only recently denied. The Part B claim is still open.

On September the 5th of 2006 I was told ORAU would in the next 30 days certify the litmus case and define the class. SINW or the litmus worker heard nothing further after 60 days, so I contacted OCAS and was informed that litmus case number one was not okay because he was employed after 1957/60 during the active

uranium work for Mallinckrodt in the SEC. Delay in defining a class and selecting another litmus case was explained because NIOSH believed the NRC, the Nuclear Regulatory Commission, might have relevant records that turned out -- and that turned out not to be the case. This raised a deja vu memories of suddenly-discovered new records that turned out not to be relevant, but significantly delayed the Mallinckrodt SEC deliberations.

A new litmus case was assigned in November. The Dow petition was qualified as SEC 00079 on December the 4th, and I received the notification letter December the 7th. For some reason the SEC petition has not been posted on the OCAS web site, despite my request to do so, and I was told just yesterday that this was because it has not yet been in the *Federal Register*.

A hectic exchange of e-mails between SINW, Senator Obama's office and NIOSH then ensued about various details of the Dow class definition and the availability of NIOSH's SEC evaluation report. Many of these concerns were expeditiously addressed by NIOSH through Larry

Elliott and Laurie Ishak Brier, whose efforts we very much appreciated. That part of the SEC process worked well; establishing the SEC counselor's position was a major step forward. NIOSH then flip-flopped twice, telling us first the Dow SEC would be considered by the Board at this meeting in Naperville, then telling us in February at Denver. SINW protested and the presentation date was moved back to December. Then on December the 1st of this year Larry Elliott provided seven reasons why the petition would be presented to the Board in Denver in February, five months after we were originally informed about the SEC petition.

We still do not know the proposed NIOSH SEC 00079 class definition, whether or not it will be modified by the Department of Labor on review, or when we can expect to see a draft of the NIOSH evaluation report. We learned a few minutes ago that this might be sometime in January of 2007.

We have been told by NIOSH that they would restrict the class to 1957 to '60, which is too limited, in our view. SINW believes the residual contamination period should be covered

because thorium -- and beryllium, for that matter -- are still on site, but the relevant one, the thorium, that processing continued into the 1990s with the commercial and the nuclear streams not being separately discernable.

NIOSH claims they can reconstruct doses accurately to uranium exposure for Mallinckrodt, but are unable to reconstruct the doses due to thorium exposure.

Then I want to say a few words about the human side of EEOICPA. The most troubling aspect of EEOICPA 2000 to me is the documentation from the Hostettler House Judiciary Subcommittee hearings of active behind-the-scene efforts by OMB and Labor to deny claimants benefits and to thwart the SEC process. Memos obtained under subpoena threat to HHS and Labor document this unequivocally, even though Shelby Hallmark, in his December the 5th Hostettler Subcommittee testimony, and OMB officials deny this is their intent.

I am shocked and awed and angry as both a citizen and a taxpayer that agents of the executive branch would try to deliberately

counteract the clear intent of Congress in awarding nuclears their just due under the Act. The driving force for this concerted campaign appears to be to hold down costs. Mr. Hallmark is worried the total program cost could reach $7 billion if SECs were awarded to all the sites that merit one.

To evaluate this concern, one would first have to see a detailed cost breakdown and weigh it against the misery and total cost of the present protracted process. These comprehensive cost figures have not been made publicly available, to my knowledge. My wife Louise has asked this Board for total EEOICPA costs at two regular meetings, but thus far the data has not been provided that she has asked for. And Louise may address the Board about this matter tomorrow.

This slow pace of claims adjudications and payments, and the low ratio of payments to denials, are all testimony to the fact that efforts to thwart the benefits payment are indeed working.

Over 2,000 years ago the Pharisees were judged harshly as hypocrites because they adhered too

narrowly to the letter of the then-current law. Now as then I respectfully suggest the entire EEOICPA program is missing the spirit in which President Clinton and Congress enacted EEOICPA in 2000. You will hear at this meeting from Jim Burgess, a GSI claimant and now a friend, who will exhort the Board to please decide to expedite the process for GSI workers before he dies. My plea and that of SINW is the same as that of Mr. Burgess. Thank you very much.

DR. ZIEMER: Thank you very much, Dan. Board members, do any of you have any questions for Dan?

(No responses)

I was checking, Dan, while you were talking, on the -- the Dow -- as far as I can tell, the Dow report is not on the web site yet. Is that correct, Larry? I don't -- I don't see it myself.

DR. MCKEEL: Right. I understand it is maybe on the way to the *Federal Register*, but the -- the -- and I -- I was told that it couldn't be posted there until that occurs, so...

DR. ZIEMER: Is the Dow -- maybe I'll just ask NIOSH in general -- the Dow Chemical one that's

on our list for coming to the Board in January, is that Dow Madison that --

DR. MCKEEL: That's Dow Madison, uh-huh.

DR. ZIEMER: I just want to make sure we're talking about the same one.

DR. MCKEEL: Yes, sir.

DR. ZIEMER: Thank you, Dan. John Ramspott.

MR. RAMSPOTT: (Off microphone) I promise this is not a 400-page book. (Unintelligible) to get brevity, couple of Board members were kind enough to share -- oh, my gosh, we got enough (unintelligible), and I've heard that in other meetings so it wasn't anything new, but -- tried to put together something that -- a little bit of an outline (unintelligible). (On microphone) My name's John Ramspott and I have definitely spoken to the Board and some of the members in the audience before, and I certainly appreciate the time. Quite some time ago I actually made a commitment and a pledge that I would try to bring you information about General Steel Industries that has never been published, and I would do it honestly, accurately and try and do it scientifically to the best of my ability. The 400-page book that

I gave to everyone, there was a section in there that actually said if there's anything contrary to what I put in the book, please let me know, and I haven't received any nasty letters or any phone calls or -- you know, hey, you -- you're off-track.

What I'm going to tell you tonight actually reflects some of that because now I'm actually starting to see some responses to what we have to talk about.

That cover page actually says it all, and I know this is a uranium site, as well, but there was something more radioactive than the uranium there, way before the uranium ever came there. It was called a betatron. And the title of this is what did the betatron do to all the inspected materials? Its danger of radiation was not limited to just the AEC uranium metal. The device and activation must be factored in. I have asked government experts, NIOSH and others, to include it. I also -- kind of curious why it's never been pointed out in previous documents. I've looked a lot of spots about General Steel Industries; it's not there. Were the GSI workers harmed? We believe

absolutely yes. Not just a few of them, many of them. We feel now we know the real betatron story and it's time to share this information, 50-plus years too late. Please review the information as we proceed.

The first page -- I actually tried to put a copy of the -- or I did put a copy of the -- I call it the law all the time, but it's the Act, and it clearly, on page eight of that Act, says particle accelerators are part of the program. Yet at one meeting in St. Louis I actually heard the Board kind of happy to see a new project other than just a radiation -- or a uranium project to look at. Well, okay, this one will really give you one.

In a recent e-mail that I received -- and I want to definitely second the motion -- NIOSH adding someone to help claimants is unbelievable. It's fantastic. It works. Because we're actually seeing some real results now that haven't come out before. This e-mail that came back to us, OCAS determination at this point in time is that radiation exposure can be estimated from skyshine -- that was in my book -- and neutron activation/photofission

of the uranium metal as well as direct irradiation of the metal itself. Well, I think that may kind of answer the question we had when I explained about the guys taking four shots of the uranium with a 24-million volt betatron, but there -- it's a good start. That fission, that's not limited to the uranium. And I think I heard earlier, and I've done my homework the best I could and I really salute Dr. Ziemer 'cause the target material in most accelerator projects is the size of a head of a pin. The castings of uranium at General Steel Industries -- the one they talk about was the ingot, 3,000 pounds. The dingot was bigger. And then they also mention slices, slabs, billets and rods. So the geography -- or the geometry of those different items, and the weight of them, bigger than the head of a pin and you -- you're ex-- you're totally correct, Doctor. I -- matter of fact, I've read the article that you published with another gentleman some time ago about the hazards with medical accelerators, and I really salute you because I don't think that'd be an easy position to take 'cause I'm sure the medical

accelerator guys may have not been real happy with that, but you told the truth and it actually helped, I'm sure, make some people safer that are using the devices. I think that was the reason for the article. So -- tried to do a little -- and that's just the medical ones, so we tried -- you know, they are alike, even though they're (unintelligible), they're -- accelerator capabilities with electrons producing neutrons, there's no difference. The e-mail that -- the other e-mail we got from NIOSH -- and I really -- again, there is no site like General Steel Industries. It's exactly -- I think it says you asked in your previous e-mail if there were any sites similar to GSI. We are aware of no other similar sites. We had a lot of different things at that site. Now -- and I tried to verify that again and the ORAU TIB-04 Revision 3 dated 2005, it gives a list of the sites where I assume this new TIB is being created to -- actually looks at these type of sites and according to this there are no other betatrons mentioned at any other site, so we think that by itself makes us a -- a little unique. And

if you create a TIB that addresses everybody else but it misses one, that's pretty interesting.

Now as a result of our book and I think some of the comments -- and again, I want to thank NIOSH. They sent people in to actually do an outreach meeting with us. We had real workers there, tell the truth, it was both for Dow and GSI. Some articles came up when we started talking about accelerators, activation. One of the articles I had found as a result of a Privacy Act request with Dr. McKeel, who's now shown me how to put those together. It was actually about using a betatron. The title of the article -- and it's from the Defense Technical Information Center -- "Photon Activation of Materials Subdirected -- Subjected to Betatron Radiography," the author, Vincent Z. Kutemperer*. I'm going to read little bits of it, but I have sets and I have sets for anyone that wants them and I have every document that I now have that I could mail to you later. I won't burden you with them now, but -- it starts out (reading) Materials that have been radiographed using a

25-million volt betatron are analyzed for gamma radiation using a high resolution nuclear spectroscopy system -- I believe is correct -- nuclear spectra of the radiograph material accumulated at different times after exposure show the presence of both short-lived and long-lived isotopes in the activated material. General Steel had a 25-million volt betatron, and a 24-million volt betatron.

The radioactivity of the metal after radiography is explained. Radioactive isotopes been in the news lately with the Soviet spy. They're pretty dangerous when you ingest them. And I'm not saying these guys ingested that exact material, but now that it's in the news, it got my attention a little bit more.

The radioactivity of the material after radiography -- or I'm sorry, after radiography -- is explained on the basis of the creation of several isotopes which resulted from different photonuclear reactions that took place in the material during exposure. The analysis presented in this paper clearly shows that materials that have been radiographed using a 25-million volt betatron become radioactive.

The health hazards associated with the observed radioactivity are pointed out. Those betatrons were government owned. They were brought in for our purpose. I'm totally not sure what that purpose was. Was it to do the tanks or -- with their neighbor Mallinckrodt across the river, or was it -- or did it just serve a good dual purpose, because they started using it on the uranium.

And back to our target size, most of their castings -- tank turrets are 17 tons. We start getting into some of the nuclear channel heads and we're talking about 130,000 pounds, each one of those getting 500 or 600 shots from a betatron, the ca-- the big nuclear castings, that's a lot of activation, and it does build -- it is accumulative.

The abstract from the article that Dr. Kutemperer* wrote -- and I'm going to stop here just for a second, and that's why the outreach meeting was so beneficial 'cause not everybody's real sure about activation and we all said we'd do our homework. I took for granted the man was dead. Vincent would be here today but he's in Washington, D.C. He was

a professor of nuclear engineering, physics, mathematics at Milwaukee School of Engineering. It's a pretty well-known school of engineering. People like James Lovell are on the board, ex-astronaut. It's a hundred-year-old school and they're actively pursued for their quality of their students, but Vincent Kutemperer* would have been here today if he didn't have the previous commitment. And he told me, he said John, if I'd had a little more notice, but you can tell those people I will be available for conversation by phone, in person. He wrote these articles in 1974. When I sent him the book, all I heard was -- and I thought now I got a legal problem -- John, why'd you write a book about my articles? I wrote the book last year. He said this is unbelievable. This is exactly what I forecasted in my articles. I actually applied for a grant and I was told I had it, and it was from NIOSH, and the money never came. I tried to warn people 30 years ago. I'll do anything I can to help your workers, help that Board understand the issue. Feel free to give my name and phone number out -- why, I'll do that conservatively, but he's

definitely willing to help.
Next page of course is a -- a copy of the article, which I did find on the Internet through the technical documents that were available. Like I said, I have full copies for you guys. The conclusion is pretty much by itself. It's saying they really need to figure out some safe handling procedures from -- for material that's been X-rayed by a betatron, and that obviously includes the uranium.
Well, looks like it was a little late, but about 30 years later Los Alamos wrote the same thing in the accelerator safety self guide, which was in my book. One of the first topics, unit three activation, said it happens with 10 million volts or more. It also mentioned skyshine, which was in our e-mail. And I think this part's really important. The effects of shielding and skyshine are difficult to calculate, so it is usual to make an actual measurement of the dose rates under routine conditions outside of the shielding. And I don't know -- maybe I'm reading that wrong, but I think it's just about as powerful outside as it is inside if it goes over that little

shielding wall. And the owner of the property, General Steel, they let us go on the site a month ago, with cameras, with video. They didn't do anything wrong. They're trying to help the workers. That shielded roof, daylight was coming through it. There is no shielded roof. Those walls, we had a chance to measure them. Those walls are about 24 feet tall. That stuff went over the top of that like it wasn't even there. The guys were walking outside or in the plant right next door I would think were affected by it.

And the next page, Professor Kutemperer -- actually a picture, a young dapper guy here and his boss. The two of them have written articles together at the Milwaukee School of Engineering. Well, for one of the commencements in 1970 they brought George H. Tenney* to campus, and he's from Los Alamos. I'm sure Los Alamos was recruiting these kind of guys. And from my past research I believe Los Alamos has a twin to this betatron. I might be wrong, but I know they had a betatron from Allis Chalmers.

And I wanted to put proof in here 'cause I told

you I'd be as straight and honest as I could. The next page is a picture of the betatron at GSI and a betatron at Missouri School of Engineering. And you can look from the pictures, they're twins. They use the same machine, same platinum target in the machine, everything's the same. The only good thing they had, though, theirs was donated by Allis Chalmers. And that guy on the casting that's putting up film, that's a man you'll hear from tomorrow. He's here, George Luber. The other gentleman that's in the picture is going to try and get here. He's ill, but he'll do what he can.

I'm going to skip ahead a little bit if I could, showing that it was donated by Allis Chalmers, so we're talking apples for apples. These are the same machines.

Then there's a recent news article. Vincent apparently did talk to the press at that outreach meeting. It was reported from Channel 4 news in St. Louis and his sister company apparently talked to Vincent, and this guy went on public record. I mean it's nothing -- he's not hiding it. He's just sorry his words

didn't get out to the public sooner, and he knows he was too late to help the GSI guys, but he's worried about today. Then I got up a little closer just to show apples for apples again, same machine.

We can skip ahead a little bit, now we got the uranium ingot. I wasn't making a -- I didn't know we were going to talk about size of targets tonight, but that's 3,000 pounds there. And I thought it was kind of interesting. It definitely confirms -- they used words like "believed to have been used," I don't -- that's too maybe-ish, to me. You know, betatron X-ray apparatus. Why don't you call it a particle accelerator; that's what it is, probably brought over by rail -- well, they came by rail and truck is what we were told, but the handling of such operation's a pretty dangerous thing, especially after you activate it.

I'll wrap this up a little bit here. There's one real interesting piece, though, and I -- I like a little excitement. There's a picture of an X-ray cassette 'cause I did read an article about medical accelerators and manufacturers are very careful with the materials now that

they use around accelerators because when you activate stainless steel, and that's what this X-ray cassette is -- I have it in my car; it's in a plastic bag. I've had it checked for radioactivity by the fire department. They say it's okay now, but that stainless steel when it was activated, according to Los Alamos, if it contains nickel -- which most stainless steel does -- it turn that cassette into cobalt-60, and these guys handle them all day long. That's Los Alamos saying that, not me, and that's Vincent Kutemperer saying that. And I'll bet there's 40 other studies that say the same thing. So when we start talking about sources and trying to limit maybe GSI to -- oh, there was uranium, it wasn't just uranium. There was a leaky betatron that leaked out radiation. There was air dust and particles that got activated. There's uranium itself that was pretty bad by itself and then it got activated. And then can't take a picture of that ingot unless you have an X-ray cassette, that cassette became cobalt. There's more cobalt there I think than the law would allow, but they apparently didn't know it. But that's

not the guys' fault. They shouldn't be penalized for that.

And unit three Los Alamos, this was a killer. This hurts every time I read it. Grinding, burning, machining and welding -- not supposed to do that and that's all those guys did. They ingested it. They ate it like popcorn every day.

So again, just to prove sources and -- GSI magazine, it actually shows a betatron. It sees beyond the surface, through the very heart of the casting, exploring the Internet -- or exploring the internal metal structure. They knew back then what it was doing. That's the sad part.

Well, that pretty much wraps it up. The last page in there has the fact there were 30 different alloys used over there minimally. And when you activate something, you make it something else. And when you pop it again 'cause you're checking it to see if you got it fixed, now you're activating the activated material, I don't know what it becomes.

And in closing, just thank everybody for your time. I tried to do my homework, get accurate.

You folks are more educated in this than I am, so I hope, you know, it gives you some reason to help these guys get their -- some satisfaction. That outreach meeting, too, I'm going to go on record, that gave some of these guys some closure that somebody was listening. You know, and the way it was handled, they came professionally. I thank everybody that was there. It was first class. We tried to show our respect by having it videotaped. You know, there are definitely DVDs of the entire meeting. The people that did it, the court reporter, donated their time to help the workers. Everybody's trying to help these guys. I hope you folks will, too.

Any questions, if I made any mistakes or -- like I say, I have copies of all of Vincent's works. You know, besides his two articles, he did a book with 75 pages in it. I have a copy of the grant request to NIOSH for the money. It explains in detail exactly what it was. It was 1974. I never met the man before in my life, but I am going to go meet him in February 'cause I want to say hello and thank you and, you know, ask him why he wrote his article

about my book.
Thank you all. Appreciate your time. Any questions?
DR. ZIEMER: Thank you very much, John.
MR. RAMSPOTT: Thank you.
DR. ZIEMER: Questions?
(No responses)
Very good. Okay, let's go on to Larry Burgan, and Larry I believe is with Dow, or was with Dow.
MR. BURGAN: My name's Larry Burgan, B-u-r-g-a-n. I was employed at the Spectrulite Accelerating factory, which was the old Dow. I was employed there for 14 years. The first year I was in casting where they directly dealt with beryllium and thorium, and for the second year I was also in the -- in the rolling mill where they also rolled the thorium plates and sanded them and cut them. But the majority of my time, 12 years, was spent directly on the extrusion press, one press only and exclusively, and it was the same press that was used in the '60s and '50s to extrude the uranium.
And my cases -- I was -- been both chronic and

acute dosage. And to explain it, the chronic part would be the uranium dust that rained down on top of my head for those 12 years that I sat there. Now as you see from the Army Corps of Engineers, there was a red dot in the middle of the factory. That is directly over my desk. Now they didn't clean the dust out from the whole factory, from the whole building, just over my desk. And this really alarmed me, but they kept saying oh, it can't hurt you. It's just the government trying to waste money. So they -- I dismissed it 'cause I had no health problems at the time.

Then when I did develop health problems, six months later they got rid of me and all the other employees. They gave a contract that absolutely nobody would sign and in -- the arti-- it was just to get rid of us, out of sight and out of mind. My health problems increased. I was bedridden for months, had to learn to walk again. And the chronic part of this is uranium. I never knew about was up there, was never told about it by anyone. And the government knew it was up there in '89. They came back in '92, again in '96 and again

in '89, but he never informed us.
Now the acute part of my dosage was the thorium-232. Now even though they ran thorium-230 in the pot room, melted it, alloyed it, then rolled it in the rolling mill, thorium-232 popped up was completely different alloy. How did it get there? It's -- they never ran it before. And looking through the records and talking to employees, we ran it in secret. They didn't tell us. Martin Marietta brought it in.
And here's the time line. In 1986 this company, Spectrulite, got a license to produce thorium. In 1987 Martin Marietta came in and ran it for one day, six ingots. Both those helpers died four years later of brain tumors. The operator's still alive, but he didn't handle the material; he just pushed the buttons. Then the government came in in '89, two years later, and said that uranium-238 and thorium-232 was in contents exceeding guidelines. Then we ran six billets, but it was already exceeding the guidelines, according to the Department of Energy. So then -- but none of this was known to us. So then they

came in and they leased the equipment again for a week, Martin Marietta, and I ran it for five days straight, these special alloys what they told us. We kept asking what it was, and that was the only response we got, special alloy. We wasn't given no safety precautions, no warnings, not even a choice. We -- they brought us pizza for lunch, so we was eating pizza with one hand and actually holding the bare metal with our other hands, and this was how we was handling it. They came back a month later and leased it for three more days and processed. We ran it again for three more days, six or seven billets each day.

Now the government came in a year later and took another readings, and again they said concentrations were exceeding guidelines -- thorium-232 and uranium. And none of this came to light until recently.

I became sick. Like I said, I was bedridden, and when I started getting my health, I started looking around on the computer to see what causes my health could be, and this is where I started to find information, talking to people. I found Dr. McKeel, who's been a great source

of information and help. And every (sic) since then my health has never gotten better. I'm on permanent disability.

I've been a steelworker for over 20 years, six years at one factor and 14 at this one, and these last four years not working has been very difficult on me, my family and my children.

And to get to the health issues, I have what's called psoriatic arthritis where -- and arthritis covers my whole body. I'm covered in a complete rash throughout my whole body. I've never been sick in my life. The very first IV I've ever gotten in my arm was when I was being tested for radiation by Dr. Laurence Fortes in Iowa. That's how healthy I used to been. I was able to kick over my head. I was such a health person, and it just bottomed out.

A lot of my coworkers on this same machinery, the same thing. One of them, 34 years old, has to hook himself up twice a day to an IV because his immune system bottomed out.

The first meeting we had was gentlemen in their 80s or 70s and 60s talking about the radiation, uranium and thorium dust back in the old days.

Well, I got together a second study group of

everybody in their 30s and 40s and 50s who also handled radioactive material, this thorium, beryllium, and they also had to tell their stories of how their health is affected and their health problems and what's happened to their lives.

The employee who worked with me that day we ran the five billets -- the first two employees died of brain tumors about four years apart. Me and the coworker I worked with, we both have health problems. His wife has the exact same symptoms I have, almost to the letter -- rashes, arthritis, illness. His -- my wife has almost the exact same illnesses he has, all the way to the cyst on his liver and kidneys. He had to have his gallbladder removed, but no gallstones. My wife had to have hers removed; no gallstones. She has lung problems, my wife does; he has lung problems. And it just varies. It just keeps going on. I could go all day.

I've been to several funerals in the last several months, and it just keeps growing. And our financial problems -- because none of us can work. My wife's health has deteriorated.

She was fired from her church because she couldn't continue her duties. She was a Sunday School teacher for 12 years and had to give that up to care for me when I became bedridden. And all this is all because of this radiation that we was never told about, not once, never, and we still -- you know, if it wasn't for us digging this information up and talking to coworkers and finding out their health problems, none of this may have even came to light, and that's probably what they wanted when they put us out on strike and got rid of everybody. They was hoping everybody would go their separate ways and never talk, and none of this would ever come to light.

As it is now, I have to stand in line at food pantries for free food every month. I've been doing this for over a year and a half 'cause we have no money for food. We have to live just on my Social Security, which is about $1,000 a month. I have no car. We have to decide between medicines and utilities every other month, and I was -- never want in this position. I worked for a living -- to live, not to die. And these people took that choice

away from us.
And this machine, this press than ran all this radioactive material back in the '60s, back in the '50s, all this hot uranium and then again in the '90s and the '80s, this thorium, this piece of machinery, just one piece of equipment, would be somewhere safe, placed away from the public. Right? Wrong. I found it abandoned 50 feet past the county line, and it had no identification whatsoever. I mean it wasn't even on a trailer 'cause trailers have serial numbers. It was home-made wheels and it was abandoned.
Now the first red flag was before we went out on strike they spent over $100,000 to rebuild it, yet they cut it up in scrap. The other press was sold for a million dollars at the far end of the factory where it wasn't radioactive, but this one was cut up into scrap. The paint was $29 a gallon after it was rebuilt. Why does paint cost $29 a gallon? It's lead-based to cover up the alpha particles and the beta/gamma rays from uranium.
So I was both slow cooked and flash fried, and I got both of the bad ends of both of the

deals. And not only me, but my coworkers. And there is nobody to help us except you people. And I'm not asking, I'm begging you people, save our lives. We need our medicines that we can't afford. We cannot work. We can't get help, so I'm begging you people, please help us. Thank you.

DR. ZIEMER: Thank you very much, Larry, for sharing that with us.

Then Mr. Reavis? Yes, will be next.

MR. REAVIS: I wasn't figuring on getting up here today, but after listening to the Board, to NIOSH representatives, I've come to some conclusions. One of the things I was going to mention is the human aspect. The gentleman that just spoke, you could not be more eloquent about what he said. He said it perfectly.

I feel that when Congress mandated to EEOICPA, they had good intentions. Those intentions were to correct a wrong and turn it into a right. Somehow in the last six or seven years it's been turned the other way. Now we're taking things and making them worse. It feels like to me that this Board, in all due respect -- and NIOSH, has walked into a swamp and got

lost. They've forgot what it's all about. By your own admission here, right or wrong, I hear you can or cannot tell whether dose reconstruction works. You think it does. You assume it does. You also have said doing the best you can, and I realize that is what you're trying to do, the best you can. But the best you can is not good enough after six or seven years. I've watched people die. My father-in-law's gone, mother-in-law's gone. Two days ago my wife just received a paper that her claim was denied. My father-in-law had a rare form of lung cancer. He had skin cancer, and I can speak for my wife, it's long since past being about money. Money has nothing to do with it. It's right versus wrong, and what's been going on is wrong. And I feel that all of this could have been avoided, the swamp that you guys I do believe are in -- you wouldn't have to be there if in fact what I heard at the first meeting that I attended back in 2001, that you do not have to prove whether your cancer was caused at your -- at your building or at your job site. All you had to do was prove that you were there. Those claims should have -- have been

paid five, six years ago. We're spending lots of money. I heard lots of money on the table, half the work done, half the money left over. If all of those dollars would have been spent on people like the gentleman that just spoke, we'd be done with this. I would like to just pray that somebody gets some guidance to get this resolved in an honorable way. So far I don't see it being honorable. Thank you very much.

DR. ZIEMER: Thank you very much. We will have another public comment period tomorrow.

(Pause)

The public comment period tomorrow is in the evening, 7:30 to 8:30. I do want to -- Mark just indicated there may have been some others have joined us after we started this public comment session. Are there any others that are here that did not get a chance to sign up but do wish to make public comment?

Yes, ma'am, please. Just --

UNIDENTIFIED: (Off microphone) (Unintelligible) sign up?

DR. ZIEMER: Just come up to the mike -- just -- you want to -- you want to speak now, you can

just come to the mike and identify yourself and go ahead.

MS. GATES: I'm Mary Lou Gates. My father worked at Blockson Chemical during the time of the issue, from '51 till '62, and we've been going on now for what, five or six years. And he was number 100 and we were just -- he died from lung cancer in 2002 and we were just simply told that, you know, this was going to happen. I thought it was just wonderful. Jerry Weller* had called my dad when my dad was real sick in 2000 -- in 2000 Jerry Weller himself called my father and asked him -- because my father had a security clearance for Building 55 -- and asked my dad if he would be willing to help give some names of people that were working with him, and Dad was so sick he says no, I just can't do it. They've got the information they need. That's all they need. And that's -- we just thought oh, well, gee, we didn't even know anything about this claim or what was happening with this NIOSH until we started getting all the information. So we filed the claim and we were just simply told that 'cause Dad was there, he was the

maintenance foreman there in that area and did all that work, we just were assured that everything was going to be, you know, fine. He was going to get his money. He was -- he felt so good when he passed away that Mom would be taken care of with these problems. And then two days ago we got the notice saying that he was denied 'cause the dose reconstruction was -- I don't know, 47.9 percent and he had to have 50 percent. So this is what -- we were a little confused, don't know what we can do, what we can do, so we got the letter saying to sign, but the only thing in the letter says is that sign it if you're going to agree with this. So we're just kind of totally confused. What do we do? We were told about a month ago that -- what his dose construction was and that this in turn was not a final denial, that it would go to Washington for the final decision. So they said just wait and see what Washington does. If they agree with our dose reconstruction, then of course he'd be denied, but that doesn't mean he'll be denied; that's just our opinion. So we just again sat back until my mom then finally got the letter two

days ago saying that it was denied. But yet it wasn't from Washington, so we were a little confused over what do we -- what do we do? This thing, if you say it's signed, says you agree on their decision. It just seems that it just isn't right.

DR. ZIEMER: There are some NIOSH staff people here that can help you with that. Larry will get you to the right person. I suspect the thing that you're talking about signing is the OCAS -- is it the OCAS-1 form -- which simply says that you don't have any additional information to enter into the record. I don't think it says you necessarily agree with it.

MS. GATES: I mean I don't think that any -- I mean I have a lot of information, but --

DR. ZIEMER: Yeah, but they -- they will --

MS. GATES: -- of course I don't think anything I say --

DR. ZIEMER: -- they will help you with the --

MS. GATES: -- is going to help with the --

DR. ZIEMER: -- with the details on the --

MS. GATES: -- dose reconstruction or anything.

MR. ELLIOTT: I'll talk to her, but this is a DOL letter, so --

DR. ZIEMER: Oh, a Department of Labor letter.
MR. ELLIOTT: -- this is not the OCAS-1.
DR. ZIEMER: Okay.
MR. ELLIOTT: This is a DOL letter providing them a decision and asking them to accept or deny going to the appeal process.
DR. ZIEMER: But --
MR. ELLIOTT: And I know you've already talked with a PHA, a public health advisor, here. You made an appointment in the other room?
MS. GATES: No, we haven't done anything. We just --
MR. ELLIOTT: Oh, you haven't done anything? I'll --
MS. GATES: -- came in late.
MR. ELLIOTT: -- talk to her.
DR. ZIEMER: Okay. We'll make sure you talk to the right person --
MS. GATES: Well, thank you.
DR. ZIEMER: -- to follow up on this.
MS. GATES: Thank you.
DR. ZIEMER: But it doesn't mean -- I mean we -- we don't know what the outcome will be, but at least --
MS. GATES: No --

DR. ZIEMER: -- we can follow up on it for you.
MS. GATES: -- but we need to know 'cause we got confused with the form that said --
DR. ZIEMER: Sure.
MS. GATES: -- sign it and then that waives all -- that you're not objecting to anything. Thank you.
DR. ZIEMER: Right. Thank you. Any -- any others that wish -- yes, ma'am, please.
MS. MARCOSKI: My name is Bev Marcoski and I'm here representing myself. My father worked for Blockson, Owen Chemical, during the 1952 to 1962 period. I've read the SEC petition evaluation report and I have three comments on it. One is in regards to the phosphogypsum. This was a byproduct of separating out the uranium. I came up with an analogy. Phosphate, you have this rock, and my analogy was an egg you're separating. One you're using a mechanical separation, the other a chemical separation. The radon that comes from the phosphogypsum was not included from 1962 to 1982 as it would relate to my father's death. He died in 1982 of lung cancer. And I, too, just got my percentage of causation as 39.06.

He was 58 years old.
My concern is the phosphogypsum is still at the Owens site, and right now Waste Management is looking at a $23 million cost to take care of that. The other part of the concern is this was a byproduct of separating out the phosphate, even though it di-- it wasn't concerned with the uranium. I guess when I looked at Technical Basis Document 1, it said a minimal amount of the uranium went with the phosphogypsum. Then I read Technical Basis Document 2 and it said most of the radium went with that. Radon comes from radium. So this was there and it wasn't accounted for in these men's lives, this amount of radon that's being admitted (sic) by this phosphogypsum pile. I do think the government should have some responsibility for this waste product that is there and how much it's contaminating.
I know the EPA has asked them to clean it up, some of the storm water drainage. I don't know how much else it is polluting in the area. So again I guess my concern with it is it wasn't registered from 1962 on when they -- when they said they would account for radon with the lung

cases. I think they could have taken that additional time period from whenever the people were employed.

My second concern is page 31, organ dose, in the SEC -- SEC petition.

(Pause)

Page 28, I'm sorry.

DR. ZIEMER: This is page 28 of the --

MS. MARCOSKI: 28 of the SEC petition. They're using this information to give people the benefit of having medical X-rays. My father, again, had lung. But when you're doing a medical X-ray, you're radiating this area. What else is in this area is your thymus gland, which is on this chart, and also bones, which is also in this area. My concern is the immune system is -- let me think of the words I want to use for this -- the thymus gland and bone marrow both work in controlling the -- the autoimmune system creates T cells, and bone marrow creates D cells, so this is another part -- so if you're looking at lung, I believe you have to look at the effect that radiation is also having on the autoimmune system, which includes the thymus cells and the bone marrow

cells. You're also radiating them, possibly causing damage to the immune system. It isn't just an organ by organ exposure calculation. There are other factors that interplay into the body's chemistry with the autoimmune system. So I don't think you can select it out organ by organ, especially if you're looking at lung. You do have to consider bone marrow's function and the thymus cell -- gland's function of producing T cells that would also be affected. My third one in the SEC petition has to do with the health endangerment. Basically, common sense. If you were exposed say roughly to 40 percent causation factor that your job caused your cancer, I would consider that health endangerment. I think maybe the bar that you set at 50 percent causation factor is maybe a little bit too high. If someone has a weakened immune system and you come in with a ten, 20 or 30 percent factor, that can also cause -- have maybe a greater effect than causation percentage.

Those are my three comments.

DR. ZIEMER: Yes, and you actually raise some very provocative points, which in a sense are

not addressed very well by the law. For example, are there individuals who are more sensitive to radiation than others. We are -- we are mandated under this law in a sense to treat everyone the same, even though your point, biologically, is probably a good one and -- and of course the 50 percent bar is imposed on us by the law, not by -- this Board does not set that bar. That is a legal requirement, but we understand the point.

I might add, interestingly enough, in some other countries -- namely in Great Britain -- they have a sliding scale where the -- the compensation is based on the percent. So if you have, for example, a 40 percent probability of causation, then your compensation is 40 percent of some number. And if it's 60 percent, it's 60 percent of that number and so on, a sliding scale. And it's -- it's simply a -- a different public policy than the U.S. has, but perhaps every bit as valid. But the points you raise are certainly -- from a biological point of view, are -- are quite valid points certainly. But thank you very much.

MS. MARCOSKI: Thank you.

DR. ZIEMER: I saw another woman in the rear -- yes, please.

MS. MCCOLLUM: Hello, my name is Carla Martin McCollum, and I'm here to speak on behalf of my father, who was a 40-year employee of Blockson Chemical/Owen Chemicals. He worked there from 1950 to 1990. He's not able to come himself in person because he's recently been released from the hospital, but he has had a couple of bouts of cancer in the past. He worked in the building in question, Building 55, from 1954 to 1957. And what he would like -- he and my mother would like to relay to the panel, what is known.

The government did not protect the workers. There was no monitoring, no protective or safety measures were in place. No regular follow-up physical exams were done. The workers were allowed to come into direct contact with materials. There was no remediation at the site. Buildings were torn down with no cleanup process was done of record at the site to eliminate further exposures. Models were created which were not based on that specific site. They did not take into

consideration the individual, but instead categorized the group. The people were taken advantage of because of the scientific expertise that the individuals lacked to refute the denials. They also had a lack of monetary support to hire those who could possibly help them to refute those claims.

In other words, it looked good for the government to announce a possible compensation, but it appears that denial was their intent for most of the exposed workers.

In summary I'd like to say four things. Number one, the workers are on record for working at the site. Number two, there were no proper safety procedures followed. Number three, the cancers/illnesses that were denied after review could have been caused by exposure to the material in question. Initially my father was told that he had a very good chance to qualify because of his illnesses. And last but not least, most importantly, they did not inform the workers about the substance that they were exposed to. Thank you very much.

DR. ZIEMER: Thank you, Carla. Let's see, is it Bev?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Oh, I -- we just heard from you. I thought it was another one. Okay, here we go. And then -- see if I can read -- is it Jerry?

DR. WADE: Jerry Ozbolt.

DR. ZIEMER: Jerry, okay.

MR. OZBOLT: Thank you. My name is Jay Ozbolt and I --

DR. ZIEMER: Oh, Jay --

MR. OZBOLT: Jay, yeah. I'm representing my --

DR. ZIEMER: -- thank you.

MR. OZBOLT: -- father, and a lot of the stuff that -- that I would have brought forth is what this lady just had given you, but my question is -- and I've asked this of many people, can't seem to get an answer -- fortunately, and -- apparently her father -- my dad's still living, but my dad has some other problems in breathing and -- and problems with his legs that they're not exactly sure that maybe, because of the exposure to this situation, that it hasn't caused the problems and what he has now. Now he was in that -- in Building 55 from late '59

until '62 when they shut that place down. I personally had gone into that plant when my dad was working there because I had worked for a contractor taking stuff out of -- out of a cinder pile that they have there and had seen this operation. And I think, just like this lady said, they were never identified and -- and told that what they were working with and for what reason, so I guess what my question would be is is there any way that they can -- you know, I don't understand what the -- when the law was written how they can identify and say okay, the individual has to be gone in order to get the compensation. I mean if these guys were not told what they were working with and what ramifications it would go later on, I mean I just don't understand how the -- the governmental situation, that they can tie this up and say he has to be deceased before anything can be done.

DR. ZIEMER: Let me address that in part, but I'm not aware of any requirement that the claimant has to be deceased. There are many living claimants. And for this particular part of the program there is a requirement that the

individual have a -- one of a list of cancers, so there are -- some other health effects which one might associate with the workplace are not covered by this particular compensation act, but I'm not aware that -- of any requirement -- and Larry, can you confirm this? There's no requirement that the individual be deceased, is there?

MR. ELLIOTT: That's correct, there's no requirement for a person to be deceased. If they present with a cancer diagnosis and they're still alive, they should file a claim. If they have beryllium disease, they should file a claim. If they have silicosis, they should file a claim.

MR. OZBOLT: (Off microphone) Unfortunately that was not what was explained to me the last time I was at a meeting (unintelligible).

DR. ZIEMER: Okay. Yeah.

MR. OZBOLT: Thank you.

DR. ZIEMER: Okay. Yes, another comment, sir?

MR. GIRR*: Hello, my name's Cyril Girr. I'm Beverly's older brother. My father, Cyril Girr, passed away back in '82. And as she described, he died of cancer and it was one of

the cancers that has been identified but the causation percentage was 39.something, about 40 percent.

Some of the things that I don't understand, basically, are the assumptions. When you read over the literature, the causation percentages were calculated on assumptions. And the facts are there's a lot of people that died and are sick and dying. So if you base these calculations on assumptions, and the record-keeping at Blockson's was minimal at that extent -- you know, their safety -- if you look at what's required now as far as OSHA regulations and safety compliance, they were basically non-existent at that time. So how could you make assumptions to calculate an exposure rate based on facts that really didn't exist, and you're doing that basically on assumptions. The assumption that should be put into the calculation is the fact these people are dead, or some of them are extremely sick and dying, and that would give you the exposure rate of 50 percent or greater right there.

DR. ZIEMER: Okay. I don't know if that's a rhetorical question or not, but -- and one

would have to look at this particular case to know what, quote, assumptions were made. But there is an established methodology for coming up with a number for each of the cases, so -- and it may be that in this particular case that you may want to sit down with one of the NIOSH staff people and have them go through that with you. But we're required under the law to operate in a certain way. These assumptions -- there are clearly uncertainties, but they're not pulled out of the air. And in fact, if you look -- if you look very closely, what you learn is that the less we know about the dose for a person, the more likely they are to get compensated because of the way we make -- we make assumptions that are highly claimant-favorable. You -- you will find probably -- and I'd have to verify it, but I -- if you look at people who -- where we have very good dosimetry, the denial rate is likely much higher the more we know about it because we cannot operate with these broad assumptions. But the assumptions that are made are made in what I think we -- we believe are a highly claimant-favorable -- and I -- I realize if

you're at the other end of this and a denial has occurred, it may not look that way. But indeed, that -- that's the basis for -- for the assumptions that --

MR. GIRR: Well, I understand that --

DR. ZIEMER: Yeah.

MR. GIRR: -- and that was explained.

DR. ZIEMER: Yeah.

MR. GIRR: That was explained in the e-mails that my sister received, that it was based on these assumptions, but I still can't --

DR. ZIEMER: Yeah.

MR. GIRR: You know, if the facts of record-keeping are not there, you don't know what kind of direct exposures was given. You know, it's -- it's -- you know, and it is based -- you're -- you're -- you're basing it on a high assumption --

DR. ZIEMER: Right.

MR. GIRR: -- but is that assumption high enough --

DR. ZIEMER: Well, I understand your question --

MR. GIRR: -- based on what these -- yeah, I mean if people are dying --

DR. ZIEMER: And indeed that -- that is the question --

MR. GIRR: -- and they didn't meet 50 percent, how could that --

DR. ZIEMER: Yeah.

MR. GIRR: -- you know, how could that assumption be a valid assumption?

DR. ZIEMER: And it's a good question and it's -- it's the question that the staff always struggles with, and this Board does, are we making the right assumptions, so -- but your -- your -- we understand your question. We struggle with it, too.

MR. GIRR: Thank you.

DR. ZIEMER: Thank you. Other comments? If not, I -- oh, yes, Mr. Miller.

MR. MILLER: Very briefly, it's been a long time coming --

DR. ZIEMER: Could you identify yourself for --

MR. MILLER: I've got my (unintelligible) --

DR. ZIEMER: -- the court reporter in case he doesn't recognize you.

MR. MILLER: Thank you. Mr. Chairman, I -- very briefly, Blockson Chemical has been a long time coming. It was one of my favorite topics

for the longest time as to when radon dose would finally be counted as part of the dose reconstruction, and NIOSH developed OTIB number 43, which to my knowledge has not yet been a matter that the Board has reviewed or that Sanford Cohen has added to their list of items to prepare for the Board. I just would like to put one question on the table about OTIB number 43 and the question is -- it's based on some Florida rock phosphate facilities and -- and you -- you -- the question about how do you account for uncertainty. That is unknown as to who was exposed to what radon when, where you were located. But this model assumes a 50 percent confidence interval. And normally when you have production workers and you don't know where they worked, but you knew they were production workers, you use the 95th percentile. Interestingly enough, this model labels the 50 percent confidence interval the best estimate, which is a bit peculiar because normally we don't associate a best estimate dose with a 50 percent confidence interval when you don't have any data for individuals at that facility, assuming it's permissible to use data

from another facility. And so I just would like to put on the table that there may be a matter for inquiry for the Board to look at to see whether that model is in fact as claimant favorable as we normally assume they are. Thank you.

DR. ZIEMER: Thank you. I -- I think that TIB may be on our list, we -- if it's not already on -- we have a -- we have a number of TIBs that are on -- on -- on the docket for review. If that's not on it, it will be.

DR. WADE: I put it on.

DR. ZIEMER: Thank you. Any other comments? Yes, sure.

MS. REAVIS: If your method of --

DR. ZIEMER: Please identify yourself for our --

MS. REAVIS: Oh, Linda Reavis. My dad worked at Blockson and passed away in '95 with lung cancer. But if there's only eight cases out of the over 200 that worked at Blockson that have reached a settlement and everyone else so far has been denied, I don't know how that could be claimant favorable because it seems like it's just the opposite, so that was kind of one

point that you were just talking --

DR. ZIEMER: Yeah, I'm not sure what is eight out of -- what -- Larry's not with us now, but --

MS. REAVIS: So whatever formula they're using for Blockson I don't think is the correct formula, either. And if any man that worked in Building 55 all those years and then was denied, then like you're saying, you know, what is the point? Why is -- what's that formula doing? It certainly isn't working. For this company it isn't.

DR. ZIEMER: Well, your point is well made and we'll certainly be aware of that as we proceed. Thank you.

MS. REAVIS: Okay.

DR. ZIEMER: Yeah. Thank you all for being with us today. Again, there is a public comment period tomorrow if -- if any of you wish to speak, either again or additional folks speak, we -- yes, and Senator Obama will be here to address the assembly at -- we believe at 11:15 tomorrow, speaking on behalf of his constituents here. And also the regular meeting will get underway at 8:30. So thank

you very much. We're recessed until tomorrow morning.

(Whereupon, the day's business was concluded at 5:48 p.m.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of Dec. 11, 2006; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 18th day of February, 2007.

_____

STEVEN RAY GREEN, CCR

CERTIFIED MERIT COURT REPORTER

CERTIFICATE NUMBER: A-2102